

CAN CANADA AVOID ARCTIC MILITARIZATION?

A Monograph

by

LCOL Yan Poirier

Canadian Army



School of Advanced Military Studies
United States Army Command and General Staff College
Fort Leavenworth, Kansas

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Name of Candidate: LCOL Yan Poirier

Monograph Title: Can Canada Avoid Arctic Militarization?

Approved by:

_____, Monograph Director
William J. Gregor, Ph.D.

_____, Deputy Director, School of Advanced Military Studies
Gerald S. Gorman, Ph.D.

_____, Director, School of Advanced Military Studies
Henry A. Arnold III, COL, IN

Accepted this 22nd day of May 2014 by:

_____, Director, Graduate Degree Programs
Robert F. Baumann, Ph.D.

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ABSTRACT

CAN CANADA AVOID ARCTIC MILITARIZATION? by LCOL Yan Poirier, Canadian Army, 54 pages.

In the next few decades, global warming effects and the melting glaciers are expected to make the Arctic's natural resources and navigable sea lines of communications more accessible. The Arctic presents outstanding economic development opportunities and thus, there are many countries that hold ambitions to claim those future resources for themselves. Who owns the Arctic is currently a diplomatic, academic and legal debate. Nonetheless, the potential for future disputes is real and palpable. As the ice cover shrinks, the tension and competitive atmosphere could possibly develop into military conflicts. All the Arctic nations including Russia publicly oppose militarization. However, examination of the Arctic nations' strategies and recent military actions might suggest otherwise. Concurrently, nations not bordering the Arctic Ocean, particularly China, have demonstrated a keen interest in Arctic geopolitics and economic development. As an Arctic nation, Canada has been loudly reaffirming its sovereign Arctic claims. However, the question for Canadian policymakers is whether to place confidence in diplomacy to avoid militarization or to take actions to counter the perceived steps by other nations to militarize the Arctic. Can Canada avoid militarization of the Arctic?

Four main arguments have been brought forth to justify why Canada should militarize the Arctic. To demonstrate that Canada can avoid militarizing the Arctic, it was necessary to investigate each of the four arguments to identify specific conditions, capabilities, actions or relationships that could motivate military competition. Both Arctic and non-Arctic actors have diplomatically declared that they want to avoid militarization and conflicts in the Arctic. The sincerity of those statements can be determined by comparing the diplomatic initiatives with the military preparations and actions. Consequently, this paper initially analyzes the Northwest Passage dispute to show that the concerns do not justify a need for militarization. Subsequently, the current and potential future Arctic claims are reviewed. These territorial disputes are unlikely to lead to military conflict. Next, Russia's strategy and actions are examined to determine if Russia is sincere when it states that it wants to develop the Arctic peacefully and avoid militarization. Then, China's actions are assessed to determine if the claim for militarization is justified. Finally, Arctic sovereignty and security is analyzed from a Canadian perspective. Examining the evidence used to support these four arguments leads to the conclusion that that these arguments are without merit. Canada can uphold its sovereign claims and develop the Arctic without militarization.

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ACRONYMS

NATO	North Atlantic Treaty Organization
NORAD	North American Aerospace Defense Command
UNCLOS	United Nations Convention on the Laws Of the Sea

INTRODUCTION

Canada has a choice when it comes to defending our sovereignty over the Arctic. We either use it or lose it. And make no mistake, this Government intends to use it. Because Canada's Arctic is central to our national identity as a northern nation. It is part of our history. And it represents the tremendous potential of our future." ... "In defending our nation's sovereignty, nothing is as fundamental as protecting Canada's territorial integrity; our borders, our airspace and our waters.

—Stephen Harper, Prime Minister of Canada¹

In recent years, the Arctic has become a constant subject of discussion and debate within political, journalistic and academic circles in Canada and around the world. Along with global warming, the Arctic is currently transforming. The glaciers are melting faster than originally predicted creating the possibility of a summer Arctic Ocean ice-free as early as 2020.² As a result, new navigable sea lines of communications will become available for global shipping and natural resources extraction. In hydrocarbons alone, the United States Geological Survey estimates that there are approximately 90 billion barrels of oil, 1,669 trillion cubic feet of natural gas, and 44 billion barrels of natural gas liquids currently undiscovered in the Arctic, with 84 percent lying in offshore areas.³ This geopolitical transformation of the Arctic presents outstanding economic development opportunities for many generations to come and therefore, there are many countries that hold the ambition to claim those future resources for themselves.

The Arctic Ocean is incredibly vast, with more than 14 million square kilometers. It is an area about five times the size of the Mediterranean Sea.⁴ With the exception of a few disputes, the

¹Stephen Harper, "Prime Minister Harper announces New Arctic Offshore Patrol Ships," Speech delivered in Esquimalt, British Columbia, July 9, 2007, Prime Minister of Canada website, <http://www.pm.gc.ca/eng/news/2007/07/09/prime-minister-stephen-harper-announces-new-arctic-offshore-patrol-ships> (accessed February 4, 2014).

²James E. Overland and Muyin Wang, "When Will the Summer Arctic be Nearly Sea Ice Free?" *Geophysical Research Letters* 40, no 10 (May 28, 2013): 2097.

³Kenneth J. Bird et al. "Circum-Arctic Resource Appraisal: Estimates of Undiscovered Oil and Gas North of the Arctic Circle," *United States Geological Survey Fact Sheet 2008-3049* (2008). <http://pubs.usgs.gov/fs/2008/3049/> (accessed September 17, 2013).

⁴*Encyclopedia Britannica Online*, s.v. "Arctic Ocean," <http://www.britannica.com/EBchecked/topic/33188/Arctic-Ocean> (accessed March 20, 2014).

territorial and exclusive economic zone of each Arctic littoral country is well defined and generally accepted. However, each Arctic littoral country is preparing a claim to extend its rights in the Arctic Ocean beyond their exclusive economic zone. Many non-Arctic countries, such as China, oppose the new claims. Who owns the Arctic is currently a diplomatic, academic and legal debate. Nonetheless, the potential for future disputes is real and palpable and is often raised by politicians, journalist and academics. As the ice cover shrinks, sea lines of communications open and access to resources becomes available. The tension and competitive atmosphere could possibly develop into military conflicts.

The Arctic Council, created after the Cold War, has provided a good forum for dialogue and collaboration between Arctic countries and six international organizations representing Arctic indigenous people. Nevertheless, the Arctic Council has been ignoring actions that threaten to militarize the region.⁵ Likewise, the recent announcement that the North Atlantic Treaty Organization (NATO) will not get involved in the Arctic demonstrates a common desire among NATO members to avoid militarization of the Arctic.⁶ All the Arctic nations, including Russia, publicly oppose militarization. However, examination of the Arctic nations' strategies and actions might be perceived otherwise. For example, the United States' recent increase of ballistic missile interceptors in Alaska to deter North Korea and Russia's permanent reoccupation of old Soviet military sites in the Arctic has the potential of resurfacing old suspicions and distrust between the two most dominant military powers in the World.⁷ Concurrently, nations not bordering the Arctic Ocean have demonstrated a keen interest in Arctic geopolitics and economic development.

⁵Rob Huebert, "It's Time to Talk About Arctic Militarization," *National Post*, May 6, 2013, <http://fullcomment.nationalpost.com/2013/05/06/arctic-piece-1-for-monday/> (accessed September 19, 2013).

⁶Gerard O'Dwyer, "NATO Rejects Direct Arctic Presence," *Defense News*, May 29, 2013, <http://www.defensenews.com/article/20130529/DEFREG/305290022/NATO-Rejects-Direct-Arctic-Presence> (accessed September 20, 2013).

⁷Huebert, "It's Time to Talk About Arctic Militarization."

Representatives from China, India, Italy, Japan, South Korea and Singapore have recently joined the Arctic Council as observers.⁸

The narratives concerning the Arctic in the Canadian media have been mixed. On one hand, there is a call for international cooperation in order to develop the Arctic economically, socially and environmentally in a responsible and peaceful manner. On the other hand, there is fear in Canada that it will lose its sovereign rights to the Arctic and some Canadians perceive the need to militarize it to protect those rights.⁹ As an Arctic nation, Canada has been loudly reaffirming its Arctic sovereign claims. However, the question for Canadian policymakers is whether to place confidence in diplomacy to avoid the militarization¹⁰ or to take actions to counter the perceived steps by other nations to militarize the Arctic. Is there a military challenge to Canadian Arctic sovereignty? Can Canada avoid militarization of the Arctic?

Four main arguments have been brought forth to justify why Canada should militarize the Arctic. The first argument involves the recognition of the Northwest Passage as Canadian internal water. The second argument focuses on countering current and potential future territorial disputes over Arctic claims. The third argument involves a response to the increased military posture of littoral nations in the Arctic, particularly Russia. Lastly, proponents argue that non-Arctic actors, more specifically China, who continue to rise both economically and militarily will challenge

⁸Ellen Emmerentze Jervell and Alistair Macdonald, "Arctic Council Grants Observer Status to Six Countries," *The Wall Street Journal*, May 15, 2013, <http://online.wsj.com/news/articles/SB10001424127887324767004578484621098493056> (accessed September 20, 2013).

⁹Martin Shadwick, "Due North", *Canadian Military Journal*, 8, no. 1 (Spring 2007): 103-4, <http://www.journal.forces.gc.ca/vo8/no1/doc/shadwick-eng.pdf> (accessed January 19, 2014).

¹⁰The Webster dictionary define militarization as: "To put weapons and military forces in (an area)." For the purpose of this monograph, militarization of the Arctic means: the act of keeping military capability in readiness in the Arctic region.

Canadian Arctic claims.¹¹ These arguments shape the rhetoric that has been used over and over in the media to justify Canadian militarization of the Arctic. However, by examining the evidences used to support these arguments, it is possible to demonstrate that there is no need for Canada to militarize the Arctic.

To demonstrate that Canada can avoid militarizing the Arctic, it was necessary to investigate each of the above arguments to identify specific conditions, capabilities, actions or relationships that could motivate military competition among the Arctic nations. In addition, it was essential to expand the research's focus to assess the tendencies of potential competitors (nations and organizations) outside the Arctic nations that could affect Arctic militarization. Both Arctic and non-Arctic actors have diplomatically declared that they want to avoid militarization and conflicts in the Arctic. The sincerity of those statements can be determined by comparing the diplomatic initiatives with the military preparations and actions. Consequently, this paper initially reviews the status of the Northwest Passage and analyses the Northwest Passage debate to show that the concerns do not justify a need for militarization. Subsequently, the current and potential future Arctic claims are reviewed to illustrate that possible territorial disputes are unlikely to lead towards military conflict. Next, Russia's strategy and actions are examined to determine if Russia is sincere when it states that it wants to develop the Arctic peacefully and avoid militarization. Then, China is assessed to determine if the claim for militarization is justified considering China's rise and proven interest in the Arctic. Finally, the Arctic sovereignty and security is analyzed from a Canadian perspective. Canadian strategy, military capabilities and its historical approach to defense must be weighed against potential threats in order to determine if Canada can avoid militarization of the Arctic.

¹¹Louis Girard, "Canada's Northern Strategy and the Militarization of the Arctic," *World Socialist Website*, September 10, 2010, <http://www.wsws.org/en/articles/2010/09/arct-s10.html> (accessed September 19, 2013) or Franklyn Griffiths, Rob Huebert, and P. Whitney Lackenbauer, *Canada and the Changing Arctic: Sovereignty, Security, and Stewardship* (Waterloo: Wilfrid Laurier University Press, 2011), 1-12.

THE NORTHWEST PASSAGE

One of the most common reasons stated in the media and by politicians to justify militarization of the Canadian Arctic is the Northwest Passage. From the Canadian perspective, there are two major concerns regarding the Northwest Passage. The first is the need to obtain the international recognition of the Northwest Passage as Canadian internal water way. The second concern arises from the potential security, environmental, social and safety impacts associated with using the Northwest Passage as a new high density sea route replacing traditional global maritime shipping lanes. The ice cover has provided Canadians the luxury of keeping the Northwest Passage issue confined to the discussion forum. However, with the ice melting away, the issue has resurfaced and now needs to be dealt with.

In recent years, the Arctic has seen an increase in maritime traffic. From 2012 to 2013, the Northern Sea Route, along the Russian Arctic coast, has seen a maritime traffic increase of 19 percent.¹² Similarly, the Canadian Arctic has also experienced an increase in maritime shipping as well.¹³ Every time that the sea ice extent reaches a record low, expectations flare up that the opening of new Arctic sea lanes will replace traditional maritime shipping routes. The logic behind these expectations is that the Arctic sea lanes provide diversification and shorter routes and thus, are cheaper than the established routes between Europe and Asian trading giants using the Strait of Malacca and Suez Canal.¹⁴

However, the high expectations might not be justified. As clearly depicted in a recent study on the subject, opening the Arctic to greater shipping will have a negligible effect on the

¹²David Kashi, "Russian Arctic Coast Sees More Maritime Traffic: How The Kremlin Is Supporting Cargo Vessels Using Northern Sea Route," *The International Business Time*, September 26, 2013, <http://www.ibtimes.com/russian-arctic-coast-sees-more-maritime-traffic-how-kremlin-supporting-cargo-vessels-using-northern> (accessed March 19, 2014).

¹³Pete Evans, "Canadian Port Sees Increased Shipping Traffic as Arctic Melts," *Alaska Dispatch*, September 15, 2012, <http://www.alaskadispatch.com/article/canadian-port-sees-increased-shipping-traffic-arctic-melts> (accessed March 19, 2014).

¹⁴Malt Humpert, *The Future of Arctic Shipping – A New Silk Road for China* (Washington: The Arctic Institute, 2013), 4.

global maritime shipping routes. Actually, it is estimated that the trade between Northern Europe, the most relevant region for Arctic shipping, and China will only represent 2.9 percent of China's international trade. Moreover, it is estimated that the majority of the shipping will be transiting through the Northern Sea Route and not the Northwest Passage.¹⁵ In fact, the Russian Northern Sea Route is shorter and less risky than the Canadian Northwest Passage.¹⁶ Russia is developing its northern coast into a major maritime trade route. In 2011, President Putin declared: "I want to stress the importance of the Northern Sea Route as an international transport artery that will rival traditional trade lanes in service fees, security and quality."¹⁷ Consequently, to support its vision, Russia has 16 deep-water ports in the Arctic and a large fleet of icebreaker ships, including nuclear icebreakers. In addition, Russia is establishing 10 search-and-rescue stations with their own ship and aircraft to support transit through the Northern Sea Route.¹⁸ As a result, the International Maritime Organization Secretary General declared, "In the forthcoming five years, the Northern Sea Route will be the main shipping lane for navigation in the Arctic."¹⁹

Conversely, Canadian Northwest Passage development as a main shipping lane is lagging far behind the Russian Northern Sea Route. With only one deep-water Arctic port located nearly 2000 km South of the Northwest Passage, no search-and-rescue capability located in the Arctic and a limited fleet of older diesel icebreakers, a significant increase in maritime traffic is not materializing. In fact, the small increase in trans-Arctic shipping has occurred on the Northern Sea Route.²⁰ However as the ice retreats, it is expected that the Northwest Passage will see an increase of maritime traffic related to natural resources extraction activities and niche trans-Arctic

¹⁵Malt Humpert, 4.

¹⁶Angelo Scorza, "North West Passage Defies Northern Sea Route," *Ship2Shore*, October 28, 2013, <http://www.ship2shore.it/english/articolo.php?id=11696> (accessed March 18, 2013).

¹⁷Michael Byers, "The (Russian) Arctic is Open for Business," *The Globe and Mail*, August 12, 2013, <http://byers.typepad.com/politics/2013/08/the-russian-arctic-is-open-for-business.html> (accessed March 17, 2014).

¹⁸Ibid.

¹⁹Angelo Scorza, "North West Passage Defies Northern Sea Route."

²⁰Michael Byers, "The (Russian) Arctic is Open For Business."

maritime transportation. An increase in cruise ships carrying Arctic tourists and naval traffic related to commercial activities caused by Arctic expansion and development is also expected to be a part of the additional maritime traffic that the Canadian Arctic might see.²¹ To support this increased level of maritime activities, Canada is already planning to invest in new capabilities including a deep-water port, a new polar icebreaker, new patrol ships capable of sustained operations in first-year ice and additional space based wide area surveillance using RADARSAT II.²² However, supporting this increase in maritime activities is mainly the responsibility of the Canadian Coast Guard.²³ The Canadian Armed Forces responsibilities will be to support to the Coast Guard and other government agencies. In summary, the increase of maritime traffic anticipated in the Northwest Passage will not be as high as expected and will not require military forces to support the traffic.

The other, more contentious issue, is the legal status of the Northwest Passage. For many years, Canada has been arguing that the Northwest Passage is a part of Canada's internal waters and that Canada has the right to control its access. On the other hand, other foreign nations including Canada's nearest ally, the United States, do not agree with Canada and assert that the Northwest Passage as an international strait through which ships from all countries have a right of passage as per the Law of the Sea.²⁴

The Northwest Passage issue has been Canada's upmost Arctic sovereignty concern for decades. Because the Northwest Passage's status has been framed as a challenge to sovereignty

²¹Karl Magnus Eger, *Marine Traffic in the Arctic – A Report Commissioned by the Norwegian Mapping Authority* (Oslo: Analyse & Strategi AS, August 2011), 18-19.

²²Canada, Minister of Indian Affairs and Northern Development and Federal Interlocutor for Metis and Non-Status Indians, *Canada's Northern Strategy: Our North, Our Heritage, Our Future*, (Ottawa: Minister of Public Works and Government Services Canada, 2009), 10, <http://www.northernstrategy.gc.ca/cns/cns.pdf> (accessed September 16, 2013).

²³Martin Shadwick, "Due North," *Canadian Military Journal*, 8, no. 1 (Spring 2007): 103-4, <http://www.journal.forces.gc.ca/vo8/no1/doc/shadwick-eng.pdf> (accessed January 19, 2014).

²⁴Roger Howard, *The Arctic Gold Rush: The New Race for Tomorrow's Natural Resources* (London: Continuum, 2009), 50-52.

by the United States, Canadians have demonstrated a genuine passion in support of Canada's rights.²⁵ The transit of the Northwest Passage in 1969 by the United States tanker S.S. Manhattan and in 1985 by the United States icebreaker CGS Polar Sea, without prior authorization from Canada, only reinforced the Canadians perception that the United States challenged Canadian sovereignty.²⁶ Those events led to a Canada-United States bilateral agreement in 1988 that stipulated that both countries would cooperate on matters regarding the Northwest Passage and they affirmed that the two countries agree to disagree about the status of the Passage.²⁷

From an American point of view, the Northwest Passage is considered an international strait because it joins two high-seas areas used for international navigations.²⁸ Geography is the key to the United States' legal argument for the Northwest Passage. However, what motivates the disagreement is not the fear that Canada will obstruct freedom of navigation within the passage. The United States recognizes and appreciates its excellent relationship with Canada. The United States is worried that recognizing the Northwest Passage as Canada's internal waters will create an international precedent for other contested international straits in the world such as the Strait of Hormuz, where the freedom of navigation is contested by Iran. Considering the importance of freedom of navigation to the American economy, the United States is unlikely to change its position because for the United States the implications are global.²⁹

²⁵Franklyn Griffiths, "Canadian Arctic Sovereignty: Time to Take Yes for an Answer on the Northwest Passage," in *Northern Exposure: Peoples, Powers and Prospects in Canada's North*, ed. Abele Frances (Montréal: Institute for Research on Public Policy, 2009), 107.

²⁶Michael Rappaport, "Northern Exposure," *National*, January-February 2011, 24, http://cbanational.rogers.dgtpub.com/2011/2011-02-28/pdf/Northern_Exposure.pdf (accessed March 19, 2014).

²⁷"Agreement Between the Government of Canada and the Government of the United States of America on Arctic Cooperation," January 11, 1988, *Treaty E101701*, <http://www.treaty-accord.gc.ca/text-texte.aspx?id=101701> (accessed March 19, 2014).

²⁸Franklyn Griffiths, 110-1.

²⁹Michael Byers, "Time to Negotiate the Northwest Passage with the United States," *Policy Options*, October 2011, 68-69, <http://www.irpp.org/en/po/the-new-normal-majority-government/time-to-negotiate-the-northwest-passage-with-the-united-states/> (accessed March 20, 2014).

As suggested by Franklyn Griffiths, a respected Canadian veteran of Arctic issues, a possible solution might be for Canada to accept and recognize that the Northwest Passage is an international strait. As such, he solidly argues that even if Canada can gain acceptance of its claim that the Northwest Passage comprises Canadian internal waters, Canada cannot by itself prevent entry and transit of the Northwest Passage archipelago by foreign ships, particularly nuclear submarines.³⁰ Conversely, he argues that by recognizing the Northwest Passage as an international strait, Canada can simplify its security dilemma by exercising the right to dictate the sea lanes that foreign ships must utilize while transiting. Moreover, transiting ships must transit using a continuous and expeditious route while respecting the Law of the Sea. Such a policy prevents activities that threaten the sovereignty, integrity or political independence of the bordering state. Furthermore, ships transiting through must respect international standards and bordering-state regulations related to environmental pollution and safety at sea. In addition, he proposed that Canada should develop bilateral and multilateral security arrangements with the United States and other Arctic countries to reinforce surveillance and control of the Arctic, including the Canadian Northwest Passage. He concludes by affirming that the only viable option for Canada to accept the Northwest Passage as an international strait and developing agreements with other Arctic nations and organizations to reinforce Canadian control.³¹

Concerning the Canadian sovereignty concerns, Griffiths clearly demonstrated that no one is actually challenging Canada's possession of the waters surrounding Canada's Arctic Islands, including the Northwest Passage. As he concisely summarized "Sovereignty conflicts often come down to a struggle for possession. But not where the Northwest Passage is concerned. When we consider the legalities, our dispute with the United States and other maritime powers is about terms of transit, not about ownership or possession, which is assured under the Law of the

³⁰Franklyn Griffiths, 108-9.

³¹Ibid, 127-128.

Sea.”³² The same message was given by President G.W. Bush during his closing speech at a North American Summit in 2007 "There are differences on the Northwest Passage. We believe it's a international passageway. Having said that, the United States does not question Canadian sovereignty over its Arctic islands and the United States supports Canadian investments that have been made to exercise it's sovereignty."³³

In summary, the current dispute regarding the recognition status of the Northwest Passage and the expectations for increased maritime traffic does not require militarization of the Arctic. The Canadian Coast Guard should be the principal agency to manage the increased maritime traffic in the Northwest Passage, which is anticipated to be lower than originally expected. The Canadian Armed Forces should be employed in a supporting role to other government agencies and civilian authorities as they do elsewhere in the country. Nonetheless, the Canadian Armed Forces will need the capability, capacity and resources necessary to train for missions in support of the Canadian the Canadian Coast Guard and other government agencies. The framing of the Northwest Passage as a sovereignty issue has been misunderstood by Canadians for decades. There is no challenge to ownership of the Northwest Passage, only disagreement about the right of passage. Regardless, if Canada and the United States come to an agreement or continue to ‘agree to disagree’ as they do currently concerning the recognition status of the Northwest Passage, the divergence of opinion will not lead to conflict.

³²Franklyn Griffiths, 111.

³³George W. Bush, “Closing Remarks 2007 North American Summit,” Speech delivered in Montebello, Canada, August 21, 2007, reported by Ben Feller, “Bush concerned about hurricane victims,” *USA Today*, August 21, 2007, http://usatoday30.usatoday.com/news/world/2007-08-20-3895588483_x.htm (accessed March 20, 2014).

ARCTIC CLAIMS AND POTENTIAL DISPUTE

One of the most common reasons cited in the media to justify militarization of the Arctic is the current and potential future territorial claims disputes by Arctic Coastal nations. With resources becoming increasingly accessible and cost-effective to retrieve, the transformation of the Arctic has been depicted as a new gold rush race that could lead to a resource war between nations.³⁴ A consequence of the implementation of the 1982 United Nations Convention on the Laws Of the Sea (UNCLOS) was an increase in the number of maritime territorial disputes around the world, including the Arctic. From a Canadian perspective, there are currently three ongoing Arctic territorial claims and the potential for other disputes when Canada submits its final maritime claim defining the full extent of its continental shelf beyond the actual 200 nautical miles exclusive economic zone.³⁵

Two of the three current Canadian territorial disputes are with Denmark. One of them is concerning a small portion of the Lincoln Sea and the other one is concerning Hans Island; the only disputed portion of land in the entire Arctic circle. Both disagreements have their origin from 1973 negotiations between Canada and Denmark on dividing the maritime border between Greenland and Canada's Arctic archipelago. Even though an agreement was reached between the two countries, two small exceptions were set aside for future negotiations in order to avoid delay in the signing of the entire 2685 kilometers long maritime border agreement. These two exceptions, Lincoln Sea and Hans Island, still constitute today unresolved Canadian territorial

³⁴Kaj Hober, "Territorial Disputes and Natural Resources: The Melting of the Ice and Arctic Disputes," *Oil & Gas Journal* 109, no. 6 (February 7, 2011), <http://www.ogj.com/articles/print/volume-109/issue-6/exploration-development/territorial-disputes-and-natural-resources.html> (accessed September 19, 2013).

³⁵Canada, Department of Foreign Affairs and International Trade, *Statement on Canada's Arctic Foreign Policy: Exercising Sovereignty and Promoting Canada's Northern Strategy Abroad* (Ottawa: Department of Foreign Affairs and International Trade, 2010): 6-7, <http://www.arctic-council.org/index.php/en/document-archive/category/12-arctic-strategies> (accessed September 16, 2013).

disputes.³⁶ Of both disputes, it is without a doubt Hans Island that has attracted the most media attention. Measuring only about a mile in diameter, this tiny inhabited island sitting equidistant from Greenland and Canada's Ellesmere Island has generated disproportionate international dispute.³⁷ As such, politicians and military forces from both countries have been subsequently taking turns at planting national flags on the Island to stake claim while in response, the other country issues diplomatic notes of protest. However, the dispute between the two NATO countries has always stayed within the diplomatic realm and with a touch of humor, both sides leave bottles of national alcoholic beverages and welcome notes behind to await the return of their adversary. In fact, the Hans Island dispute has no impact on the Canadian and Danish maritime borders. As stated by Michael Byers, Canada Research Chair in Global Politics and International Law at the University of British Columbia and an expert on Arctic affairs, "The sensationalized report played directly into the hands of politicians, who were happy to take advantage of a risk-free Arctic sovereignty dispute for domestic electoral purposes."³⁸ Canada and Denmark are still trying to find an acceptable solution regarding Hans Island, that might entail splitting the Island in two. Likewise, Canada and Denmark jointly announced in November 2012 that they have reached a tentative agreement concerning the remaining maritime boundary in the Lincoln Sea.³⁹ As such, the territorial war rhetoric surrounding the two disputes are unfounded. Moreover, as mentioned by Roger Howard, the Hans Island dispute "perfectly illustrates how irrational and exaggerated such speculation of a 'resource war' really is."⁴⁰

³⁶Michael Byers, "Creative thinking on sovereignty," *Policy Options*, March 2014, <http://irpp.org/en/po/opening-eyes/byers/> (accessed March 20, 2014).

³⁷Roger Howard, *The Arctic Gold Rush: The New Race for Tomorrow's Natural Resources* (London: Continuum, 2009), 54.

³⁸Michael Byers, "Creative thinking on sovereignty."

³⁹Jacques Hartmann, "Canada and Denmark Reach Agreement on the Lincoln Sea Boundary," *Blog of the European Journal of International Law* (January 10, 2013), <http://www.ejiltalk.org/canada-and-denmark-reach-agreement-on-the-lincoln-sea-boundary/> (accessed March 20, 2014).

⁴⁰Roger Howard, 20.

The third territorial dispute that Canada is currently facing in the Arctic is with the United States regarding the maritime border in the Beaufort Sea. Canada claims that the maritime border in the Beaufort Sea should follow the 141st meridian as a continuation of the land border between the two countries. Canada's claim is based on the interpretation of a 19th century treaty when the border was established between Alaska and the Yukon. From its perspective, the United States asserts that the treaty only covers the land border between the two countries and not the Arctic ocean. The United States argues that the maritime border should be defined by using the principle of equidistance, "the tracing of a line at equal distance from the closest land point of each state, which reflects more closely the direction of the respective coastlines."⁴¹ At stake is a triangular area of about 7,000 square nautical miles that presumably contains an important quantity of natural resources.⁴² The dispute has been going on for decades but has seen positive development lately. Driven by necessity to map the seabed together, due to the lack of icebreakers, both countries have been working hand in hand in recent years to refine hydrocarbon estimates and prepare for future claims.⁴³ As a consequence, it was realized that when considering the potential future claims for the extended continental shelf and the geographic layout of the coastlines, the Americans' equidistance proposed method would actually benefit Canada.⁴⁴ In fact, the future potential claim area beyond the 200 nautical miles exclusive economical zone in both the Central and Northern Beaufort Sea is three to four times larger than the current area in the Southern Beaufort Sea with a potentially greater amount of resources. This

⁴¹Robert Dufresne, "Canada and the United States: Arctic Sovereignty," *Parliament of Canada*, December 2008, http://www.parl.gc.ca/content/lop/researchpublications/prb0834_13-e.htm (accessed March 20, 2014).

⁴²Roger Howard, 54.

⁴³Sian Griffith, "US-Canada Arctic Border Dispute Key to Maritime Riches," *BBC News*, August 2, 2010, <http://www.bbc.com/news/world-us-canada-10834006> (accessed March 20, 2014).

⁴⁴Randy Boswell, "Canada Non-Committal over U.S. Position on Beaufort Sea Dispute," *CANWEST News Service*, March 9, 2010, <http://www.canada.com/technology/Canada+committal+over+position+Beaufort+dispute/2662672/story.html> (accessed March 20, 2014).

new development provides an opportunity for both countries to negotiate a win-win solution and drive their collaboration.⁴⁵

With the dialogue and collaboration currently ongoing to resolve the maritime border in the Beaufort Sea, a possible settlement is on the horizon. Conversely, a disagreement between the two NATO countries would not lead to conflict.⁴⁶ Canada and the United States as neighboring countries have learned throughout the years to compartmentalize issues and focus on important national interests. In fact, there are other border issues between Canada and the United States, such as the Machias Seal Island on the Atlantic Coast, the mouth of the Juan de Fuca Strait and the Dixon Entrance on the Pacific Coast.⁴⁷ Agree to disagree has become the norm for Canada and the United States on many issues between these neighbors.⁴⁸ Moreover, during their disagreement in the Beaufort Sea, Canada and the United States were able to make progress concerning the defense of the Arctic. As such, the 2006 renewal of the joint Canada-United States North American Aerospace Defense Command (NORAD) bilateral agreement added maritime surveillance to NORAD's mission.⁴⁹ To recapitulate, both countries are close allies and share common defense interests through NATO and NORAD, including the defense of North America and the Arctic. Resolved or not, the Beaufort Sea territorial dispute between Canada and the United States will not lead to conflict. Hence, there is no need for military action to resolve this issue. In fact, it will be pointless for Canada to use the military to influence this border dispute considering the strength of the United States' military versus Canada's.

⁴⁵Randy Boswell, "Canada Non-Committal over U.S. Position on Beaufort Sea Dispute."

⁴⁶Katarzyna Zysk, "The Evolving Arctic Security Environment: An Assessment," in *Russia in the Arctic*, ed. Stephen J. Blank (Carlisle, PA: Strategic Studies Institute, U.S. Army War College, 2011), 106.

⁴⁷David H. Gray, "Canada's Unresolved Maritime Boundaries," *IBRU Boundary and Security Bulletin*, Autumn 1997, 61, https://www.dur.ac.uk/resources/ibru/publications/full/bsb5-3_gray.pdf (accessed 21 March, 2014).

⁴⁸Colin Robertson, "Stephen Harper's Management of the Canada-US Relationship," *Policy Options*, April 2012, <http://www.irpp.org/en/po/harpers-foreign-policy/stephen-harpers-management-of-the-canada-us-relationship/> (accessed March 21, 2014).

⁴⁹North American Aerospace Defense Command, "About NORAD," NORAD Website, <http://www.norad.mil/AboutNORAD.aspx> (accessed September 19, 2013).

What uncertainty there is arises from potential claims based upon the extent of the continental shelf. Under UNCLOS Article 76, every coastal nation can request the control of the resources on the seabed and in the subsoil for up to 150 nautical miles beyond the 200 nautical miles of their exclusive economic zone. The claim must be based on scientific proof that the area is a part of their extended continental shelf.⁵⁰ As a result, every Arctic coastal nation has decided to exercise this right in order to position itself for the possible natural resources extractions when it becomes accessible. From the five Arctic coastal states, only Norway has completed its claim for the extended continental shelf, an area located farther South than the other four nations. The remaining four, Canada, United States, Denmark and Russia are at different stages in submitting their claims and working on gathering enough scientific evidence to substantiate their claims. It is important to note that the United States has not signed or ratified UNCLOS yet. This important step will have to be done prior to the United States submitting a claim.⁵¹ Nevertheless, it is predicted that the extended continental shelf claims from Canada, Russia and Denmark will overlap and possibly result in dispute. As such, the Lomonosov Ridge, an underwater mountain range, is considered by all three sides to be an extension of their continental shelf. If this is to be true, Canada will have to negotiate new extended continental shelf maritime border with both Denmark and Russia.⁵² The negotiations between Canada and Denmark are not expected to be a problem. Considering that the principle of equidistance was used to reach agreement on the Lincoln Sea dispute, it is expected that the overlap, located near the North Pole just above the old dispute, will be divided by a prolongation of the same maritime boundary using the same

⁵⁰United Nations Conventions on the Law of the Sea (UNCLOS), December 10, 1982, http://www.un.org/Depts/los/convention_agreements/texts/unclos/closindx.htm (accessed September 17, 2013).

⁵¹Franklyn Griffiths, Rob Huebert, and P. Whitney Lackenbauer, *Canada and the Changing Arctic: Sovereignty, Security, and Stewardship* (Waterloo: Wilfrid Laurier University Press, 2011), 41.

⁵²Michael Byers, "Stephen Harper and the North Pole," *The Tyee.ca*, December 24, 2013, <http://byers.typepad.com/arctic/2013/12/stephen-harper-and-the-north-pole.html> (Accessed March 17, 2014).

principle.⁵³ Conversely, the outcome is expected to be different with the Russians, where tension is projected to rise.⁵⁴

However, Russia's actions in recent years have been portrayed as a reason for Canada to militarize the Arctic.⁵⁵ In particular, the planting of a Russian flag on the seabed at the North Pole was highly publicized and criticized in Canada. In 2007, Arthur Chilingarov, Deputy Chairman of the Russian Duma and a famous Polar scientist, directed a submarine expedition to the North Pole and planted a Russian flag at the North Pole to bolster Russia's claim to the North Pole while declaring "The Arctic is ours, and we should demonstrate our presence."⁵⁶ Canadian Foreign Minister Peter McKay interpreted the Russian symbolic action as a challenge. Minister MacKay declared, "This isn't the 15th century. You can't go around the world and just plant flags to claim territory."⁵⁷ In fact, politicians and media from both nations overstressed the event for a while to maintain the sovereignty narrative on the domestic side were.⁵⁸ As explained by Chivers, planting the flag was a domestic publicity stunt and not a serious claim to the Arctic Pole. Russia was only taking geological and water samples at the North Pole as part of a survey in support of the resubmission of their Arctic claim. A claim that was initially rejected in 2001 due to the lack of scientific evidence.⁵⁹ As declared by Russia Foreign Minister Sergey Lavrov "The goal of this expedition is not to stake out Russia's rights, but to prove that our shelf stretches up to the North

⁵³Michael Byers, "Stephen Harper and the North Pole."

⁵⁴Louis Girard, "Canada's Northern Strategy and the Militarization of the Arctic," *World Socialist Website*, September 10, 2010, <http://www.wsws.org/en/articles/2010/09/arct-s10.html> (accessed September 19, 2013).

⁵⁵Alexandr Golts, "The Arctic: A Clash of Interest or a Clash of Ambitions" in *Russia in the Arctic*, ed. Stephen J. Blank (Carlisle, PA: Strategic Studies Institute, U.S. Army War College, 2011), 43.

⁵⁶Ariel Cohen, "Russia in the Arctic: Challenges to U.S. Energy and Geopolitics in the High North," in *Russia in the Arctic*, ed. Stephen J. Blank (Carlisle, PA: Strategic Studies Institute, U.S. Army War College, 2011), 14-15.

⁵⁷Franklyn Griffiths, Rob Huebert, and P. Whitney Lackenbauer, *Canada and the Changing Arctic: Sovereignty, Security, and Stewardship* (Waterloo: Wilfrid Laurier University Press, 2011), 43.

⁵⁸C.J. Chivers, "Russia Plant Flag on the Arctic Seabed," *New York Times*, August 3, 2007, http://www.nytimes.com/2007/08/03/world/europe/03arctic.html?_r=0 (accessed September 18, 2013).

⁵⁹Ibid.

Pole. There are concrete scientific methods for this.”⁶⁰ As such, Russia seems to support the process within UNCLOS that sets the rules for determining claims based on scientific data.

Similarly, the signing of the Ilulissat Declaration on 28 May 2008 clearly set the tone for future relationships in the Arctic for the five coastal nations. The main achievement of this declaration is the agreement by all five nations to utilize UNCLOS to resolve the delimitation of the Arctic Ocean. In addition, they acknowledged that there is no need to create another comprehensive legal framework to govern the Arctic Ocean. They agreed to collaborate on several issues including navigation safety, environmental protection, scientific research, search and rescue, and protection of the unique Arctic ecosystem and its inhabitants. Furthermore, they recognized and supported the collaboration by other international organizations, such as the International Maritime Organization, the Arctic Council and the Barents Euro-Arctic Council, on the responsible Arctic Ocean development.⁶¹ Even though this is only a declaration, Ilulissat provided a solid foundation for future collaboration and mitigates many potential disputes over maritime border claims.

The Russian Federation Foreign Policy Concept reinforce Russia’s intention to follow UNCLOS by stating that, “In accordance with the international law, Russia intends to establish the boundaries of its continental shelf, thus expanding opportunities for exploration and exploitation of its mineral resources.”⁶² By signing the Ilulissat declaration, Russia demonstrated a second time its adherence to UNCLOS by concrete actions. Russia surprised many observers in 2010 by ending its 40 years maritime dispute in the Barents Sea with Norway. Initiated in the 1970s, the dispute was initially about fish but was extended to include reserves of oil and gas in the Barents Sea. The treaty divides the area, about the size of Germany, into two equal portion.

⁶⁰C.J. Chivers, “Russia Plant Flag on the Arctic Seabed.”

⁶¹“Ilulissat Declaration,” Arctic Ocean Conference, Ilulissat, Greenland, May 27-29, 2008, http://www.oceanlaw.org/downloads/arctic/Ilulissat_Declaration.pdf (accessed January 20, 2014).

⁶²Ariel Cohen, 17.

As stated by the Kremlin, “This is a practical illustration of the principle that all disputes in the Arctic must be tackled by the Arctic nations themselves by way of talks and on the basis of international law.”⁶³ Another example of Russia’s adherence to UNCLOS was its actions in regard to claims in the Sea of Okhotsk. After submitting an UNCLOS claim in 2001, Russia waited 13 years before receiving a favorable judgment. Motivated by this announcement, Sergei Donskoi, Russia’s Minister of Natural Resources and Environment, declared, “The work with the UN Commission has enabled us to establish constructive relations with our partners. We plan to file a relevant application involving the Arctic Shelf this autumn. There is much work to do, and this work is of great importance for this country because the Arctic shelf is rich in minerals and bio-resources.”⁶⁴ These two examples clearly demonstrate that Russia is willing to negotiate and find peaceful solutions under international laws to solve its maritime territorial dispute. In addition, Russia’s intentions concerning its extended shelf claim are clearly described in the summary of the Russian Arctic Strategy;

Closely intertwined with the importance of the region to Russia are the country's efforts to delimitate outer limits of the continental shelf in the Arctic Ocean region, defined as a top priority task to be accomplished by 2015. The Russian government is clear that the process has to be carried out entirely within the framework of international law. The document defines as a strategic priority development of cooperation with other polar states on maritime boundary delimitation.⁶⁵

Russia’s intentions and actions distinctly demonstrate that it wants to resolve their Arctic claims peacefully in collaboration with Arctic neighbors and in accordance with international laws.

⁶³Luke Harding, “Russia and Norway Resolve Arctic Border Dispute,” *The Guardian*, September 15, 2010, <http://www.theguardian.com/world/2010/sep/15/russia-norway-arctic-border-dispute> (accessed March 18, 2014).

⁶⁴Maria Balyabina, “Resource-Rich Sea of Okhotsk All Russian,” *The Voice of Russia*, March 17, 2014, http://voiceofrussia.com/news/2014_03_17/Resource-rich-Sea-of-Okhotsk-all-Russian-3729/ (accessed March 18, 2014).

⁶⁵Comment on the Russian version of *The Fundamentals of State Policy of the Russian Federation in the Arctic in the Period up to 2020 and Beyond*, March 2009 by Katarzyna Zysk, “Russian Arctic Strategy,” *GeoPolitics in the High North*, http://www.geopoliticsnorth.org/index.php?option=com_content&view=article&id=100 (accessed September 19, 2013).

In summary, the current and potentially future territorial claims disputes between Canada and other Arctic coastal nation neighbors do not justify the militarization of the Arctic. As demonstrated, the current disputes between Canada with Denmark and the United States have no potential for military escalation. Furthermore, the signature of the Ilulissat Declaration by the five Arctic coastal nations clearly demonstrates their intent to resolve the delimitation of the Arctic Ocean peacefully by using UNCLOS. In addition, Russia's stated intentions and actions distinctly demonstrate its desire to resolve their Arctic claims peacefully in accordance with international laws. Once more, the media and politicians have exaggerated the situation concerning territorial dispute to rationalize a potential need for militarization of the Arctic by Canada. There is no need for Canada to militarize the Arctic to assert its territorial claims.

RUSSIA, FRIEND OR FOE

Out of all the Arctic countries, it is without a doubt Russia that has generated the most concern with regard to militarization. From a Canadian standpoint, Russia might be perceived as a potential military challenger when compared with the other three Arctic littoral nations who are NATO allies. The mistrust remaining from the Cold War and media rhetoric are significant factors that affect Canadian' opinion regarding the need to militarize the Arctic to defend Canada's sovereignty against Russia. However, the reality is that the main driving factor concerning the militarization of the Arctic is directly related to the relationship between Russia and the United States.⁶⁶

On one hand, Russia's actions make Canada ponder the need for militarization. In recent years, Russia has improved its military capabilities in the Arctic and the fresh events in Ukraine

⁶⁶Franklyn Griffiths, Rob Huebert, and P. Whitney Lackenbauer, *Canada and the Changing Arctic: Sovereignty, Security, and Stewardship* (Waterloo: Wilfrid Laurier University Press, 2011), 62.

makes Canadian decision-makers wary of Russian motives.⁶⁷ This climate of uncertainty makes it hard to believe that Russia could be a credible and reliable partner in the Arctic.⁶⁸ On the other hand, Russia has also demonstrated its ability to be a key and peaceful partner. As one of the founders of the Arctic Council, Russia has been an active member in the council since and even before its inception. As such, Russia collaborated in several working groups, expert groups and task forces to coordinate Arctic policies regarding the environment, biodiversity, emergency response and safety, business, socio-economic and sustainable development. In addition to producing several studies, the Arctic Council has been able to develop and approve the legally-binding Arctic Search and Rescue Agreement and the Arctic Environmental Protection Strategy.⁶⁹ Nevertheless, the Arctic Council scope is limited and is not authorized to “deal with matters related to military security.”⁷⁰ Overall, Russia’s conflicting actions make it harder to clearly determine its intent.

From a Russian’s perspective, the Arctic region has an enormous significance to the Russian economy and to safeguarding Russia’s great power status.⁷¹ In fact, Moscow identifies its success in the High North as critical to its future as an energy great power and to the well-being of the Russian economy.⁷² As mentioned in Russia’s official energy strategy, “energy security is

⁶⁷Alexei Anishchuk, “Russia’s Putin Wants Beefed-up Presence in Arctic,” *Reuters*, April 22, 2014, <http://uk.reuters.com/article/2014/04/22/uk-russia-putin-arctic-idUKBREA3L1C120140422> (accessed April 23, 2014).

⁶⁸Katarzyna Zysk, “The Evolving Arctic Security Environment: An Assessment,” in *Russia in the Arctic*, ed. Stephen J. Blank (Carlisle, PA: Strategic Studies Institute, U.S. Army War College, 2011), 116.

⁶⁹Arctic Council Portal, <http://www.arctic-council.org/index.php/en/> (accessed September 18, 2013).

⁷⁰Arctic Council, “Declaration on the Establishment of the Arctic Council,” Ottawa, Canada, September 19, 1996.

⁷¹Marlène Laruelle, “Russian Military Presence in the High North: Projection of Power and Capacities of Action,” in *Russia in the Arctic*, ed. Stephen J. Blank, (Carlisle, PA: Strategic Studies Institute, U.S. Army War College, 2011), 66.

⁷²*Ibid*, 64.

the most important element in Russia's national security."⁷³ Currently, about 20 percent of Russia's Gross Domestic Product is coming from the production of oil and gas in the Arctic.⁷⁴ Furthermore, it is estimated that about 80 percent of Russian gas and 90 percent of hydrocarbon deposits are located in the Arctic, of which 66.5 percent are located offshore in the Barents and Kara Seas.⁷⁵ These new energy fields located in the Arctic are seen as a crucial for replacing the current oil and gas production in Western Siberia, which is expected to decline between 2015 and 2030.⁷⁶ Considering that the energy sector accounts for about half of Russia's national income and 65% of its export earnings, Moscow cannot afford to let its Arctic hydrocarbons' enterprise fail.⁷⁷

The problem that Russia presents as an energy hegemon does not depend on the size of its reserves, but rather on its capability to exploit them.⁷⁸ Initially, Russia tried to develop its oil and gas resources in the Arctic independently through the two government controlled oil companies, Gazprom and Rosneft. However, Russia has quickly realized, after a deep recession in 2008, that it could not do it on its own and that it absolutely needed foreign investments and technical expertise to exploit hydrocarbons in the Arctic.⁷⁹ Given the high price and risk associated with hydrocarbon exploration and exploitation in the Arctic, Russia has been seeking collaborators. In fact, the Russian State owned oil company Rosneft has established a partnership with the United States company Exxon Mobil for hydrocarbon exploration and exploitation in the

⁷³Jeffrey Mankoff, "Eurasian Energy Security," *Council on Foreign Relations*, February 2009, 4, www.cfr.org/content/publications/attachments/Eurasia_CSR43.pdf (accessed March 20, 2014).

⁷⁴Michael Byers, "The (Russian) Arctic is Open for Business," *The Globe and Mail*, August 12, 2013, <http://byers.typepad.com/politics/2013/08/the-russian-arctic-is-open-for-business.html> (accessed March 17, 2014).

⁷⁵Katarzyna Zysk, 97.

⁷⁶Katarzyna Zysk, 97.

⁷⁷Roger Howard, 144.

⁷⁸*Ibid.*, 143.

⁷⁹Ariel Cohen, "Russia in the Arctic: Challenges to U.S. Energy and Geopolitics in the High North" in *Russia in the Arctic*, ed. Stephen J. Blank (Carlisle, PA: Strategic Studies Institute, U.S. Army War College, 2011), 24.

Russian and American's portion of the Arctic.⁸⁰ Similarly, the other hydrocarbon Russian state owned giant, Gazprom, has established a framework agreement with the Anglo-Dutch energy giant Royal Dutch Shell for the development of hydrocarbons in the Russian Arctic.⁸¹ These facts demonstrate that Russia needs financial and technical cooperation in the Arctic in order to extract its natural resources. As mentioned, by then Prime Minister Putin, in 2010: "It is well known that, if you stand alone, you cannot survive in the Arctic. It is very important to maintain the Arctic as a region of peace and cooperation."⁸²

Russia's interest in the Arctic is both economic and geostrategic. During the Cold War, the Arctic theatre was strategically important and considered the Soviet's bastion of the nuclear fleet.⁸³ The Cold War is over but Russia still sees the need to maintain a military presence in order to preserve its security in the Arctic region; not only to counter and influence other Arctic nations, but also to balance the rise of Asian powers, particularly China.⁸⁴ The 2009 Russian Arctic Strategy mentions that to secure national interests in various military and political situations, there is a need to maintain the necessary combat potential, including special Arctic military formations.⁸⁵ As pointed out by Ariel Cohen, military conflict in the Arctic is a scenario

⁸⁰"Rosneft, Exxon Mobil Sign Landmark Deal to Develop Arctic Reserves," *RT Business*, April 16, 2013, <http://rt.com/business/exxon-rosneft-deal-signed-arctic-195/> (accessed March 20, 2014).

⁸¹"Gazprom, Shell Ink Arctic Cooperation Deal," *Euractiv.com*, April 9, 2013, <http://www.euractiv.com/energy/gazprom-shell-sign-arctic-deal-news-518980> (accessed March 20, 2014).

⁸²Michael Byers, "Great Powers Shall Not in the Arctic Clash," *Global Brief*, November 11, 2013, <http://globalbrief.ca/blog/2013/11/11/great-powers-shall/> (accessed March 20, 2014).

⁸³Katarzyna Zysk, 92.

⁸⁴Stephen Blank, *Russia in the Arctic*, (Carlisle, PA: Strategic Studies Institute, U.S. Army War College, 2011), vii.

⁸⁵Comment on the Russian version of, *The Fundamentals of State policy of the Russian Federation in the Arctic in the Period up to 2020 and Beyond*, March 2009, by Katarzyna Zysk, "Russian Arctic Strategy," *GeoPolitics in the High North*, http://www.geopoliticsnorth.org/index.php?option=com_content&view=article&id=100 (accessed September 19, 2013).

that Russia deems possible.⁸⁶ In addition, the 2008 Russian National Security Policy identifies the protection and maintenance of its nuclear deterrence capability as a priority.⁸⁷

As part of its strategy, Russia has steadily increased its military resources and forces since 2007 in the Arctic. As such, Russia has resurrected the old Soviet habit of patrolling the Arctic from the air, on the sea and under the sea, which includes routine testing of its Arctic neighbor defenses.⁸⁸ Nonetheless, it is important to note that the increase in military capabilities and actions in the Arctic by Russia were accomplished in a transparent manner and in accordance with international laws.⁸⁹ Of all the Arctic nations, Russia has the largest military force in the High North. With eleven naval bases and many other land based facilities and capabilities, the most effective component of the Russian Armed Forces in the Arctic is the Northern Fleet, which includes about two-thirds of all Russian naval power. Most of Russia's military forces are located in the western Arctic around the Kola Peninsula, near Norway.⁹⁰ However, the Northern Fleet has experienced major difficulties in modernizing. Several naval construction projects were delayed by the 2008-2009 financial crisis.⁹¹ Regardless of the impressive combat power that Russia has in the Arctic, overall the United States still has superior military capabilities, especially with regards to naval and air arms. The military capabilities of the United States Arctic littoral NATO Allies include an additional four destroyers, 30 frigates and 11 submarines, all trained to conduct warfare in the Arctic region. It is evident that Russian military capabilities do not challenge the

⁸⁶Ariel Cohen, 20.

⁸⁷Rob Huebert, "It's Time to Talk About Arctic Militarization," *National Post*, May 6, 2013, <http://fullcomment.nationalpost.com/2013/05/06/arctic-piece-1-for-monday/> (accessed September 19, 2013).

⁸⁸Ariel Cohen, 21.

⁸⁹Ariel Cohen, 21.

⁹⁰Alexandr' Golts, "The Arctic: A Clash of Interest or a Clash of Ambitions" in *Russia in the Arctic*, ed. Stephen J. Blank (Carlisle, PA: Strategic Studies Institute, U.S. Army War College, 2011), 54-56.

⁹¹Marlène Laruelle, 83.

capabilities of the four Arctic littoral NATO countries.⁹² Russia has only one advantage; it owns more icebreakers and is the only country that possesses nuclear icebreakers.⁹³

The traditional Russian approach to strengthening its northern border is to use military forces. It is a normal Russian practice and part of their National Security Strategy.⁹⁴ The melting of the ice in the Arctic will open new sea approaches to the Russian North Coast and Russia, therefore, feels the need to strengthen its security and defense on that front.⁹⁵ The key aspect about the militarization of High North by Russia, is that the Russian military build up has been done in a transparent and predictable manner and not directed against any other Arctic nation. Russia has repeatedly stated that they are not militarizing the Arctic region and wants to avoid escalation.⁹⁶ The Russian position was particularly obvious when NATO, at Norway's request, contemplated the possibility of including the Arctic as a part of NATO's region of interest. In contrast, Canada opposed NATO's involvement in the polar region in order to avoid a Russian military response and also to avoid the incursion of non-arctic nations into Arctic affairs.⁹⁷ As a result, NATO Secretary-General Anders Fogh Rasmussen announced, "At this present time, NATO has no intention of raising its presence and activities in the High North. The Arctic is a harsh environment. It rewards cooperation, not confrontation. I trust we'll continue to see cooperation."⁹⁸ Nonetheless, whether NATO includes the Arctic as a region of interest or not, it

⁹²Alexandr' Golts, 57-58.

⁹³Ariel Cohen, 23.

⁹⁴Ibid, 18-22.

⁹⁵Katarzyna Zysk, "The Evolving Arctic Security Environment : An Assessment," in *Russia in the Arctic*, ed. Stephen J. Blank (Carlisle, PA: Strategic Studies Institute, U.S. Army War College, 2011), 111.

⁹⁶Trude Pettersen, "Arctic Ambassador: There is No Militarization of the Arctic," *Barents Observer*, February 3, 2014, <http://barentsobserver.com/en/arctic/2014/02/arctic-ambassador-there-no-militarization-arctic-03-02> (accessed March 19, 2014).

⁹⁷Luke Coffee, "NATO in the Arctic: Challenges and Opportunities," *The Heritage Foundation*, June 22, 2012, <http://www.heritage.org/research/reports/2012/06/nato-in-the-arctic-challenges-and-opportunities> (accessed September 19, 2013).

⁹⁸Gerard O'Dwyer, "NATO Rejects Direct Arctic Presence," *Defense News*, May 19, 2013, <http://www.defensenews.com/article/20130529/DEFREG/305290022/NATO-Rejects-Direct-Arctic-Presence> (accessed September 19, 2013).

does not prohibit the invocation of the Article 5 of the North Atlantic Treaty by a NATO Arctic country if Russia attacks.⁹⁹ From a Russian perspective, Russia feels surrounded by NATO. Because all the other Arctic coastal nations are part of NATO, Russia sees the necessity to defend its Arctic territories, which are vital to Russia's economy and security.

Recent events in Ukraine and Crimea have certainly undermined the trust Western nations have had in Russia's commitment to respect the sovereignty of other countries and international laws. Ultimately actions in the Ukraine will bring Western nations to question Russia's commitments to develop the Arctic peacefully and in collaboration.¹⁰⁰ However, the Arctic and Ukraine are two different things. From a Russian point of view, the rapprochement between the Ukraine and the European Union and NATO is unacceptable. As stated by specialists on Russian Security, "The latter [Russia] has accepted, although unwillingly, NATO and EU enlargements, but the participation of Ukraine and Georgia in the western security architecture constitutes a red line for Russia. Moscow considers the membership of the said countries in NATO a violation of Russia's traditional sphere of influence and a Western attempt to put into practice the idea of Russia's strategic encirclement."¹⁰¹ From a Russian perspective, the West's retention of NATO, the organization put in place to fight the feud Soviet Union, even though the Cold War enemy threat was gone signals continued hostility toward Russia. More and more the

⁹⁹The North Atlantic Treaty. Washington D.C., April 4, 1949, http://www.nato.int/cps/en/natolive/official_texts_17120.htm (accessed September 19, 2013). Article 5 states that: "The Parties agree that an armed attack against one or more of them in Europe or North America shall be considered an attack against them all and consequently they agree that, if such an armed attack occurs, each of them, in exercise of the right of individual or collective self-defence recognised by Article 51 of the Charter of the United Nations, will assist the Party or Parties so attacked by taking forthwith, individually and in concert with the other Parties, such action as it deems necessary, including the use of armed force, to restore and maintain the security of the North Atlantic area. "

¹⁰⁰Rob Hubert, "How Russia's Move into Crimea Upended Canada's Arctic Strategy," *The Globe and Mail*, April 2, 2014, <http://www.theglobeandmail.com/globe-debate/how-russias-move-into-crimea-upended-canadas-arctic-strategy/article17766065/> (accessed April 13, 2014).

¹⁰¹Sophia Dimitrakopoulou and Andrew Liaropoulos, "Russia's National Security to 2020: A Great Power in the Making?" *Caucasian Review of International Affairs*, 4, no. 1 (Winter 2010): 36-7, http://www.cria-online.org/10_4.html (accessed April 13, 2014).

old Western rivals were getting closer to Russia by absorbing in the European Union and NATO previous Soviet bloc countries.¹⁰² The West crossed Russia's red line with Georgia in 2008 and did it again recently in the Ukraine.¹⁰³

However, capturing Crimea was not free for Russia. It has earmarked \$7 billion for Crimean economic aid and the investor exodus has already cost Russia \$51 billion and reduced estimated economic growth from 2.5 to 1 percent. Overall, the former Russian finance minister, Alexi Kudrin, projected that the Ukraine crisis will cost Russia about \$160 billion. Nevertheless, Russia has extensive foreign currency reserves estimated to be approximately \$400 billion. The foreign currency reserves allow Moscow to absorb the current projected costs related to the crisis. However, if the Ukraine conflict persists and further sanctions are applied, Russia's cash reserve might evaporate quickly.¹⁰⁴

The fact that Russia came to the table early to negotiate a peace plan for Eastern Ukraine demonstrated that Russia cannot and does not want to push much further for economic reasons; a financial loss that Russia's economy can not absorb over an extended period.¹⁰⁵ Russia needs foreign investments in order to carry on with Arctic development and it cannot afford to be isolated. It does not mean Western nations can trust Russia. Russia will only be faithful to itself, but it does mean that Russia cannot afford conflict in the Arctic and does need outside collaboration and investments to achieve its goal. With the clock ticking and the need to replace the income generated from the Western Siberian hydrocarbon sales by developing new energy

¹⁰²Sophia Dimitrakopoulou and Andrew Liaropoulos, 36.

¹⁰³Michael Shank and Kimairis Toogood, "Lessons for the Ukraine Crisis in Russia's 2008 Invasion of Georgia," *US News*, March 7, 2014, <http://www.usnews.com/opinion/blogs/world-report/2014/03/07/lessons-for-the-ukraine-crisis-in-russias-2008-invasion-of-georgia> (accessed April 13, 2014).

¹⁰⁴Ilan Berman, "What Putin is Costing Russia," *The Wall Street Journal*, April 20, 2014, <http://online.wsj.com/news/articles/SB10001424052702303663604579503433988345564?mg=reno64-wsj&url=http%3A%2F%2Fonline.wsj.com%2Farticle%2FSB10001424052702303663604579503433988345564.html> (accessed April 20, 2014).

¹⁰⁵"Ukraine crisis: Deal to 'De-Escalate' Agreed in Geneva," *BBC News*, April 17, 2014, <http://www.bbc.com/news/world-europe-27072351> (accessed April 18, 2014).

fields in the Arctic, Russia cannot and does not want its Arctic strategy to be delayed. Its recent participation during the Ukraine crisis at the Arctic Council is a clear example.¹⁰⁶ The near complete dependence of Russia's economy on hydrocarbon is the weakness that needs to be exploited to avoid militarization of the Arctic.¹⁰⁷

Make no mistake, Russia will defend its interests and will use military forces if required as was demonstrated in Georgia and Ukraine. Similarly in the Arctic, Russia will take the steps necessary to protect its Arctic territories and resources. However, unless directly provoked, it is illogical and unlikely that Russia will pursue military confrontation in the Arctic. The main purpose of Russian Arctic military forces is to protect itself, assist in security, assist in socio-economic development of the region and provide strategic deterrence through its presence and nuclear capability.¹⁰⁸ The announcement by President Putin about increasing military presence in the Arctic in response of Canada's intention to claim the North Pole is a clear example of the Russian protectionism.¹⁰⁹ This is why Arctic countries, in particular the United States, need to proceed carefully to avoid military escalation in the Arctic.

One of the key driving factors regarding whether Russia might step up militarizing the Arctic is the way the United States implements its own Arctic Strategy. The United States understands risks associated with militarization of the Arctic, spurred by media rhetoric and perceived military aggression approach. The 2013 United States Department of Defense Arctic Strategy clearly articulates those risks. "Political rhetoric and press reporting about boundary

¹⁰⁶Rob Hubert, "How Russia's Move into Crimea Upended Canada's Arctic Strategy," *The Globe and Mail*, April 2, 2014, <http://www.theglobeandmail.com/globe-debate/how-russias-move-into-crimea-upended-canadas-arctic-strategy/article17766065/> (accessed April 13, 2014).

¹⁰⁷Katarzyna Zysk, "The Evolving Arctic Security Environment : An Assessment," in *Russia in the Arctic*, ed. Stephen J. Blank (Carlisle, PA: Strategic Studies Institute, U.S. Army War College, 2011), 116.

¹⁰⁸Katarzyna Zysk, 112-3.

¹⁰⁹Luke Harding, "Russia to Boost Military Presence in Arctic as Canada Plots North Pole Claim," *The Guardian*, December 10, 2013, <http://www.theguardian.com/world/2013/dec/10/russia-military-arctic-canada-north-pole> (accessed January 23, 2014).

disputes and competition for resources may inflame regional tensions.”¹¹⁰ “Being too aggressive in taking steps to address anticipated future security risks may create the conditions of mistrust and miscommunication under which such risks could materialize.”¹¹¹ As such, the narrative in this recent strategic document recognizes the need to avoid raising militarization concerns and escalation by other nations, particularly Russia.¹¹²

The goal of the 2013 United States National Arctic Strategy is similar to that of other Arctic countries, “an Arctic region that is stable and free of conflict, where nations act responsibly in a spirit of trust and cooperation, and where economic and energy resources are developed in a sustainable manner that also respects the fragile environment and the interests and cultures of indigenous peoples.”¹¹³ First guiding principle of the strategy is to “safeguard peace and stability by working to maintain and preserve the Arctic region as an area free of conflict, acting in concert with allies, partners, and other interested parties.”¹¹⁴ The strategy also mentions the desire for the United States to accede to the Law of the Sea Convention.¹¹⁵ The common message from all Arctic countries, including Russia, is the to cooperate.¹¹⁶

At the moment, Russian militarization of the Arctic is described in the public Russia Strategy and remains transparent. Militarization of the Arctic by other NATO coastal nations, in particular the United States, will only drive the Russians to militarize further.¹¹⁷ As such, the American and Canadian military strategy approach and strategic communication plan has to be

¹¹⁰United States, *United States of America Department of Defence Arctic Strategy*, Secretary of Defence (Pentagon, November 2013): 15, http://www.defense.gov/pubs/2013_Arctic_Strategy.pdf (accessed December 19, 2013).

¹¹¹*Ibid.*

¹¹²*Ibid.*

¹¹³United States, *United States of America National Strategy for the Arctic Region* (The White House, May 2013): 4, http://www.whitehouse.gov/sites/default/files/docs/nat_arctic_strategy.pdf (accessed September 18, 2013).

¹¹⁴*Ibid.*, 10.

¹¹⁵*Ibid.*, 9.

¹¹⁶*Ibid.*

¹¹⁷Alexandr’ Golts, “The Arctic: A Clash of Interest or a Clash of Ambitions” in *Russia in the Arctic*, ed. Stephen J. Blank (Carlisle, PA: Strategic Studies Institute, U.S. Army War College, 2011), 45.

carefully managed. On many occasions, Russia has commented on the increase of military capabilities by the other Arctic littoral nations and has remarked that these actions create a security problem in the region¹¹⁸ With today's technologies and power projection capabilities, the need for permanent military forces located in the Arctic is not as relevant as was during the Cold War. Bilateral and multilateral agreements, strategic installations and ready military forces protect the Arctic. As such, it will be counter-productive for Canada to add additional military forces to the Arctic. The current plan, modest when compared with Russia's efforts, seeks to ensure that the Canadian Armed Forces has the capabilities to operate in the Arctic. Force readiness is maintained through frequent exercises and increased surveillance. These preparations are the right level of military involvement for Canada. However, the messaging contained in strategic communications about these efforts need to be less aggressive if a Russian over-reaction is to be avoided.

In summary, Russia depends upon peaceful cooperative development of its Arctic interests. It cannot afford economically and militarily to do otherwise.¹¹⁹ Russia's economy is largely dependent on its hydrocarbon industry and cannot afford to be isolated. Economic interdependence along with Russia's needs for outside investments and technical assistance will continue to restrain any Russian tendency toward aggression until Russia has replaced the declining continental oil and gas field with hydrocarbon fields in the Arctic. Militarily, Russia clearly has the largest military force in the Arctic region. However, Russia is not powerful enough to attack the United States or any other NATO Arctic littoral nation, who might invoke article 5 of the NATO treaty. Russia is building its military forces principally to defend its vital interests, to maintain influence in the Arctic region and support strategic deterrence. As long as Russian military buildup is transparent, not targeted against someone and not postured to threaten

¹¹⁸Katarzyna Zysk, 111.

¹¹⁹Katarzyna Zysk, 111.

the United States, the situation is manageable. With the crisis in Ukraine, trust in Russia is at its lowest point since the end of the Cold War. It will take time to rebuild that trust but collaboration regarding the Arctic is critical for Russia. By militarizing the Arctic, Canada will only entice Russia to militarize further in response. Canada should adopt a more tactful approach, one similar to the United States. Canada can and should avoid militarizing the Arctic in response to the Russian Arctic Strategy and should work to reinforce bilateral agreements with the United States and multilaterals with other Arctic countries, including Russia. Cooperation, competition and rivalry will remain the constant between Russia and its Arctic nation partners.

CHINA, THE ARCTIC DRAGON

With the ice melting, several non-Arctic nations have demonstrated a keen interest in the transformation of the High North. As a result, twelve non-Arctic countries have already been granted observer status in the Arctic Council. The country observers list includes several European nations, such as, France, Germany and the United Kingdom, and also distant Asian countries, such as, India, Japan, South Korea and Singapore.¹²⁰ However, of all the non-Arctic nation observers, it is without a doubt China that attracts the most attention and alarms. China's interest in the Arctic region has generated attention among journalistic, academia and political realms. They speculate about Chinese motives.¹²¹ Probably the most famous comment made by a Chinese official was that made by Rear Admiral Yin Zhuo of the Chinese People's Liberation Army Navy. Rear Admiral Yin Zhuo stated, "The Arctic belongs to all the people around the

¹²⁰ Arctic Council, "Observers," Arctic Council Portal, <http://www.arctic-council.org/index.php/en/about-us/arctic-council/observers> (accessed September 18, 2013).

¹²¹ Banyan, "Snow Dragons," *The Economist*, September 1, 2012, <http://www.economist.com/node/21561891> (accessed September 19, 2013).

world as no nation has sovereignty over it ... China must play an indispensable role in Arctic exploration as we have one-fifth of the world's population.” Such a strong comment represents the type of discussion currently occurring in Beijing.¹²² From a Canadian perspective, the unexpected and undetected arrival of the Chinese ice breaker Xue Long in Tuktoyaktuk in the Canadian Arctic in 1999, was probably the first wake up call for Canadians, generating speculation about China’s interest in the Arctic.¹²³ It is clear that China has international ambitions for the Arctic. What is less obvious is whether China will try to attain these ambitions peacefully.¹²⁴ China’s rise as an economic and military power, combined with the territorial friction with its’ neighbors in the South and East China Seas has generated Canadian concerns about China’s real intentions are regarding the Arctic. In particular, media coverage alluding to China as a possible threat in the Arctic has puzzled many Canadians. As such, China’s interest in the Arctic has been used to support militarization rhetoric.

While eager to be a dominant actor in the Arctic, Chinese officials are normally cautious when articulating China’s interests in the High North. Conscious of its status as a rising global power, China has adopted “a wait-and-see” strategy in order to avoid raising alarm in Arctic countries.¹²⁵ Beijing stresses that China’s interests in the Arctic are primarily oriented toward scientific research related to climatic and environmental changes. Besides the scientific interest, the Chinese have shown a noticeable interest in the transformation of the Arctic.¹²⁶

¹²²Kit Dawnay, “China’s Ambitions in the Arctic,” *Current Intelligence*, March 19, 2013, <http://www.currentintelligence.net/analysis/2013/3/19/chinas-ambitions-in-the-arctic.html> (accessed September 19, 2013).

¹²³Frederic Lasserre, *China and the Arctic: Threat or Cooperation Potential for Canada*, China Papers no.11 (Canadian International Council, June 2010): 3, <http://www.opencanada.org/wp-content/uploads/2011/05/China-and-the-Arctic-Frederic-Lasserre.pdf> (accessed September 19, 2013).

¹²⁴Kit Dawnay.

¹²⁵Lynda Jakobson, “China Prepares for an Ice-Free Arctic,” *SPIRI Insights on Peace and Security*, no. 2, March 2010, 2, <http://books.sipri.org/files/insight/SIPRIInsight1002.pdf> (accessed February 4, 2014).

¹²⁶Lynda Jakobson.

Seeing itself as a “near Arctic state” or an “Arctic stakeholder,” China’s investment in Arctic scientific research has been significant.¹²⁷ In 1981, the Chinese government created the Chinese Arctic and Antarctic Administration to look after its Arctic interests. Thereafter, in 1984, China founded the Polar Research Institute in Shanghai. The conversion in 1994 of an Ukrainian cargo ship into the world’s largest non-nuclear icebreaker, the Xue Long (meaning Snow Dragon), enabled China to conduct polar research. Between 1999 and 2012, Xue Long conducted five polar research missions, including a trip across the Arctic utilizing the Northern Sea Route in 2012.¹²⁸ In addition, China is currently designing a new \$613 million modern icebreaker for field research, which is expected to be built before 2016.¹²⁹ Furthermore, China also established an Arctic research facility on Svalbaard Island, the most Northern part of Norway.¹³⁰ However, China’s real motives for making these huge research investments are not clear and are not expressed in policies. As articulated by Frederic Laserre, “China faces the challenge of making the transition from growth driven by foreign investment to growth that is sustainable from the social, economical, ecological, and environmental points of view. Innovation has been identified by the Chinese government as a main engine for this new growth model, and Beijing has launched a national strategy to build an innovation-driven economy and society by 2020.”¹³¹ In fact, Laserre argues that China’s scientific interests in the Arctic are directly related to its economic development and are a definite reflection of China’s ambitions to become a global power.¹³²

In recent years, China’s established diplomatic and economic ties with Arctic countries in order to ensure that China is well positioned to benefit from the Arctic gold rush when the time

¹²⁷Kit Dawnay.

¹²⁸Ibid.

¹²⁹Wang Qian, “New Icebreaker Planned by 2016: Officials,” *China Daily*, January 6, 2014, http://www.chinadaily.com.cn/china/2014-01/06/content_17216579.htm (accessed March 20, 2014).

¹³⁰Kit Dawnay.

¹³¹Frederic Laserre, 4.

¹³²Frederic Laserre, 4.

comes. Accordingly, China concluded a \$270 billion deal with the Russian state owned oil company giant Rosneft for doubling oil supplies to China over the next 25 years. From that deal, \$60 Billion was paid upfront in order to permit Rosneft to develop new Arctic oil fields.¹³³ China needs to diversify its energy sources to provide an alternative to the Malaccan Strait route. The Strait of Malacca is considered a strategic vulnerability by China.¹³⁴ The Russian opening of the Arctic to China will permit the China National Petroleum Corporation to join Rosneft in the exploration for oil in three Russian offshore Arctic areas.¹³⁵ As pointed out by Stephen Blank, “This indebtedness and the size of the planned oil deliveries from Rosneft will give China substantial leverage in the region.”¹³⁶ In addition, China’s state owned companies have several major mining projects seeking iron-ore, copper and gold in Greenland. Furthermore, China has established strong economical links with Iceland by building a giant embassy for 500 people in Reykjavik. China and Iceland have signed a free-trade agreement and China has been granted partnership rights to explore oil-fields off shores.¹³⁷ Moreover, as the world’s major importer of natural resources and largest exporter of fabricated goods, China sees enormous potential in the new global maritime short cut through the Arctic.¹³⁸ With the increased use of the Northern Sea Route, there is an anticipation that China might try to create with Iceland a maritime shipping node similar to Singapore.¹³⁹ On the Canadian side, Chinese investments in the

¹³³“Rosneft Signs \$270 Billion Deal with China,” *Petro Weekly – News*, June 24, 2013, <http://www.petroweekly.com/rosneft-signs-270-billion-deal-with-china/> (accessed March 20, 2014).

¹³⁴Banyan, “Snow Dragons,” *The Economist*, September 1, 2012, <http://www.economist.com/node/21561891> (accessed September 19, 2013).

¹³⁵Rakteem Katakey and Will Kennedy, “Russia Lets China into Arctic Rush as Energy Giants Embrace,” *Bloomberg*, March 25, 2013, <http://www.bloomberg.com/news/2013-03-25/russia-cuts-china-into-arctic-oil-rush-as-energy-giants-embrace.html> (accessed March 20, 2014).

¹³⁶Stephen Blank, “China’s Arctic Strategy,” *The Diplomat*, June 20, 2013, <http://thediplomat.com/2013/06/chinas-arctic-strategy/> (accessed March 20, 2014).

¹³⁷Nathan Vanderklippe, “For China, North is the New Way to Go West,” *The Globe and Mail*, January 19, 2014, <http://www.theglobeandmail.com/news/national/the-north/for-china-north-is-a-new-way-to-go-west/article16402962/> (accessed March 20, 2014).

¹³⁸Nathan Vanderklippe.

¹³⁹Kit Dawnay.

Arctic are minimal with only a few minor mining operations. As mentioned by Qu Tanzhou, director of the Chinese Arctic and Antarctic Administration, “I personally feel that cooperation and communication between Canada and China is comparatively less than others. If one day the Canadian government welcomes us to cooperate on developing our scientific research over there, we would be very happy to join.”¹⁴⁰ China’s economic and diplomatic ties in the Arctic are both evident and significant.

With its recent ascension to observer status in the Arctic Council, China made it clear that it intends to have a real voice and influence on the outcome of the proceedings.¹⁴¹ China perceives the Arctic Council as the perfect place to influence Arctic policies and to avoid being marginalized. Considering that China does not have an official policy on the Arctic and that the constant Chinese narrative that the Arctic belongs to everyone, there are some concerns among Arctic coastal states about the possibility of China challenging their sovereignty claims.¹⁴² However, to become an observer, China had to agree to certain conditions, including the recognition of Arctic nation sovereignty and UNCLOS.¹⁴³ Nonetheless, China’s behavior with its’ Asian neighbors concerning maritime border disputes in both the East China Sea and South China Sea, cast a cloud of doubt over Chinese sincerity.¹⁴⁴ In contrast to those current maritime border disputes, China has no border in the Arctic and as such it has very limited rights under international laws. Moreover, considering the Chinese long-standing principle of respect of internal affairs and sovereignty of other countries, Lynda Jakobson a long time expert on Chinese Foreign Policy, concluded, “China can be expected to continue to persistently, yet

¹⁴⁰Nathan Vanderklippe.

¹⁴¹Stephen Blank, “China’s Arctic Strategy.”

¹⁴²Banyan, “Snow Dragons.”

¹⁴³Arctic Council, “Observers,” Arctic Council Portal, <http://www.arctic-council.org/index.php/en/about-us/arctic-council/observers> (accessed September 18, 2013).

¹⁴⁴Gordon G. Chang, “China’s Arctic Play,” *The Diplomat*, March 09, 2010, <http://thediplomat.com/2010/03/chinas-arctic-play/1/> (accessed March 20, 2014).

quietly and unobtrusively, push for the Arctic in spirit being accessible to all.”¹⁴⁵ Furthermore, China cannot impose itself militarily in the Arctic without challenging the Arctic coastal nations, which include the United States, Russia, Canada, Norway and Denmark. Regardless of Chinese military investments in recent years, China does not have the strength to impose itself militarily against Arctic coastal nations. In addition, China’s economic and diplomatic ties with the Arctic coastal nations are too important to break them. As stated in the Economist, “There is no suggestion that China wants to use the Arctic to challenge UNCLOS, which it has ratified, as have all the Arctic Council’s members apart from America. China has too many maritime disputes elsewhere to want to appear an utter outlaw. Nor does it have expertise in drilling and mining in extreme conditions. It will need to cooperate with the Arctic countries.”¹⁴⁶ As a non-Arctic state, China will rely on diplomatic and economic influence to impose itself as a major player in the Arctic.

In summary, China’s intent is economically driven and is not threatening.¹⁴⁷ China’s interests in the Arctic are driven more by economics than science. However, there is no indication that China intends to use military power to influence Arctic affairs. As demonstrated previously, China is using diplomatic and financial instruments to position itself in the Arctic. China’s behavior in the Arctic is similar to its behavior in many other parts of the world. China is extending its giant appetite for natural resources and influence through its economic power. By gaining the status of observer at the Arctic Council, China will certainly use its influence to shape Arctic international policies. Canada should view China’s interests in polar affairs not as a threat

¹⁴⁵Lynda Jakobson, “China Prepares for an Ice-free Arctic,” *SPIRI Insights on Peace and Security*, no. 2, March 2010, 13, <http://books.sipri.org/files/insight/SIPRIInsight1002.pdf> (accessed February 4, 2014).

¹⁴⁶Banyan, “Snow Dragons.”

¹⁴⁷Robert D. Kaplan, *Monsoon: The Indian Ocean and the Future of American Power* (New York: Random House, 2010), 280.

but as an opportunity to assist in the costly development of the Arctic.¹⁴⁸ China's interests in the Arctic does not justify a Canadian military response in the Arctic.

A CANADIAN PERSPECTIVE

In the past, the preservation of sea ice protected Canada's Arctic sovereignty and the way of life of its Inuit inhabitants. Even though slowing down climate change might still be the best solution, the predicted future looks different. At the center of the Arctic transformation are its inhabitants, who have been criticizing Canada's approach to the transformation of the Arctic.¹⁴⁹ Their shared perception of Canada's current response is well summarized by a past President of the Inuit Circumpolar Conference Canada: "Instead of aggressively facing climate change and becoming an influential international leader, however, Canada has decided that the best way to defend its sovereignty from foreign ships running the passage is with military and icebreakers."¹⁵⁰ The concept of Arctic sovereignty is often intertwined with the concept of Arctic security. However, what does Arctic sovereignty and security really mean for Canada? As briefly summarized by Professor Rob Huebert, a Canadian expert on Arctic affairs,

Canadian policy makers need to protect Canadian Arctic sovereignty in order to provide for Canadian Arctic security. The Canadian Government needs to have control over its north so that it can take action to protect against a wide number of threats that will be increasingly coming from beyond Canadian northern boundaries. As it is impossible to protect Canadian Arctic security without protecting its Arctic sovereignty and vice versa, the two concepts are completely interlinked.¹⁵¹

¹⁴⁸Michael Byers, "China Could be the Future of Arctic Oil," *Al Jazeera*, August 22, 2013, <http://www.aljazeera.com/indepth/opinion/2013/08/2013821135829162420.html> (accessed March 17, 2014).

¹⁴⁹While extremely important, the Arctic complex and unique human dimension of the Inuit culture, social and economic development are beyond the scope of this paper. For more information, *Northern Exposure* contains several good articles about this subject. *Northern Exposure: Peoples, Powers and Prospects in Canada's North* (Montréal: Institute for Research on Public Policy, 2009).

¹⁵⁰Sheila Watt Cloutier "A Principled Path," in *Northern Exposure: Peoples, Powers and Prospects in Canada's North* (Montréal: Institute for Research on Public Policy, 2009), 72.

¹⁵¹Rob Huebert, *Canadian Arctic Security: Understanding and Responding to the Coming Storm*, Preliminary Paper Foreign Policy for Canada's Tomorrow, (Canadian International Council: June 2010), 3.

Although Arctic sovereignty and security are linked, the importance for Canada is to have the necessary control over the Canadian Arctic against emerging threats. However, as previously demonstrated the emerging threats in the Arctic are not against Canada's territorial integrity and are not military related. As caricaturized by Canada's former Chief of Defence Staff, Walter Natynczyk, "If someone were to invade the Canadian Arctic, my first task would be to rescue them."¹⁵² As pointed out by Huebert, the developing of threats in the Arctic are criminally related as well as economic, environmental, societal and cultural.¹⁵³ Preserving sovereignty and security in the Arctic does not equate to military force. As is true in the rest of Canada, the control of the Arctic is primarily a responsibility of federal, provincial, and local government agencies using law enforcement agencies such as the Canadian Coast Guard and the Royal Canadian Mounted Police to reinforce security. As is done everywhere else in Canada, the Canadian Armed Forces role in enforcing security and control in Canada is one of assistance to law enforcement and government agencies. However, in order to perform this important assistance role, the Canadian Armed Forces needs the right equipment and training to operate in the Arctic.

Currently, the Canadian Armed Forces permanent presence in the Arctic is the Canadian Forces Station Alert. The force is very limited and not combat-oriented. Situated at 817 kilometers from the North Pole on the North Eastern tip of Ellesmere Island Canadian Forces Station Alert is the most northerly permanent inhabited location in the World. Established in the early 1950s, the Departments of National Defence and Environment share the facility, which houses approximately 55 military and civilian personnel who have the role of maintaining signal

¹⁵²Katarzyna Zysk, "The Evolving Arctic Security Environment : An Assessment," in *Russia in the Arctic*, ed. Stephen J. Blank (Carlisle, PA: Strategic Studies Institute, U.S. Army War College, 2011), 109.

¹⁵³Rob Huebert, *Canadian Arctic Security: Understanding and Responding to the Coming Storm*, 3.

intelligence equipment and providing environmental scientific data.¹⁵⁴ The second permanent presence is the Canadian Armed Forces Arctic Training Centre located in Resolute Bay, Nunavut. Officially opened on August 15, 2013, the new training facility is an extension of an already existing infrastructure of the Department of National Resources Canada. The training facility can accommodate up to 140 people and is also used to store vehicle and equipment with a view to reduce long term transportation costs for the Canadian Army.¹⁵⁵ Lastly, the last permanent presence in the Arctic is the Canadian Rangers, a sub-component of the Canadian Armed Forces Reserve. Formed into small patrol detachments of local inhabitants, mainly aboriginals, they are located throughout the North in isolated communities. Often portrayed as the eyes and ears of the Canadian military in the Arctic, the roles of the Canadian Rangers is mainly surveillance and assistance to federal, provincial and local government agencies, including search and rescue and local communities support. The Canadian Rangers are very useful but it is important to note that they are not combat-oriented forces.¹⁵⁶ The day to day defense of the the Arctic, it is provided in partnership with the United States through NORAD. As a bi-national organization, NORAD provides aerospace warning, aerospace control and maritime warning in the defense of North America including the Arctic.¹⁵⁷ In addition, the Canadian Joint Operations Center is responsible for the command and control of all continental operations to ensure the defense of Canada. As such, military capabilities of the Canadian Army, Royal Canadian Navy and Royal Canadian Air

¹⁵⁴Government of Canada, "Canadian Forces Station Alert," Royal Canadian Air Force Website, <http://www.rcaf-arc.forces.gc.ca/en/8-wing/alert.page> (accessed March 18, 2014).

¹⁵⁵Government of Canada, "New Arctic Training Centre boosts Army's Presence in the North," Canadian Army Website, <http://www.army-armee.forces.gc.ca/en/news-publications/national-news-details-no-menu.page?doc=new-arctic-training-centre-boosts-army-s-presence-in-the-north/hkdontpd> (accessed March 18, 2014).

¹⁵⁶Government of Canada, "Canadian Rangers," Canadian Army Website, <http://www.army-armee.forces.gc.ca/en/canadian-rangers/index.page?> (accessed March 18, 2014).

¹⁵⁷North American Aerospace Defense Command, "About NORAD," NORAD Website, <http://www.norad.mil/AboutNORAD.aspx> (accessed September 19, 2013).

Force can be deployed on short notice to the Arctic if required.¹⁵⁸ Released in 2008, Canada First Defence Strategy clearly indicates the vital role of the Canadian Armed Forces in the Arctic and the necessity for the capabilities and resources required to operate in this challenging environment¹⁵⁹ In line with the Canada First Defence Strategy, the Canadian Armed Forces in Canada's North Directive, issued in April 2011, provides more details about Canada's military approach in the Arctic. As such, the document identifies five specific objectives: exercise Canada's sovereignty through three major annual exercises, demonstrate visible presence throughout the North, support other government departments, maintain 24/7 search and rescue capabilities and build defense relationships in the region. In addition, the document mentions enhancements in defense capabilities such as increase in situational awareness, sustainment, increasing capabilities, space capabilities and cultural awareness training for key personnel.¹⁶⁰ Overall, the current Canadian military approach is satisfactory for the threats that Canada is facing and the role portrayed for the Canadian Armed Forces. However, the schedule for developing and implementing some of these new Arctic capabilities has been delayed and the resources required to train in the Arctic have become more expensive than anticipated. For example, the Arctic Offshore Patrol Ships forecasted for delivery in 2013 are now delayed until 2017 and those ships will be less capable than originally planned due to the increase in procurement costs.¹⁶¹ Also Canadian Army Program Assessment 2013-14 noted, "Recent northern exercises and operations highlight the fact that conduct of these activities can cost from

¹⁵⁸Government of Canada, "Canadian Armed Forces in Canada and North America," National Defence and Canadian Armed Forces Website, <http://www.forces.gc.ca/en/operations-canada-north-america/index.page?> (accessed March 18, 2014).

¹⁵⁹Canada, Department of National Defence, *Canada First Defence Strategy*, (Ottawa: Minister of Public Works and Government Services Canada, May 2008).

¹⁶⁰Government of Canada, "Defend Canada," National Defence and Canadian Armed Forces Website, <http://www.forces.gc.ca/en/operations-how/defend-canada.page> (accessed March 18, 2014).

¹⁶¹Michael Byers, "Sorry, NATO – We're Fresh out of Warships," *National Post*, March 12, 2014, <http://fullcomment.nationalpost.com/2014/03/12/michael-byers-sorry-nato-were-fresh-out-of-warships/> (accessed March 18, 2014).

five to seven times more than if they were conducted in Southern Canada . . . The Army will have to limit/reduce the scope of its activities in the North, thus directly impacting on Canada's ability to exercise Arctic sovereignty."¹⁶² No model can predict with accuracy the disappearance of the ice. However, one fact is certain that activities in the Arctic have increased and the Canadian Government needs to be ready to control it from the beginning. As Michael Byers is alleging, a surplus budget is a very important element of the current Canadian Government's political platform but this objective should not be achieved on the back of future defense procurement including Arctic related projects.¹⁶³ Canada has an adequate military strategy for the Arctic. However, the resourcing of this strategy needs to remain a priority and implementation timelines need to be respected in order to be ready when the time comes. To develop new capabilities and operate in the Arctic is expensive but in the end, these long term investments will pay off for generations.

As demonstrated previously, Arctic states and other stakeholders will both compete and collaborate for the Arctic resources. However, the economic development in the Canadian Arctic has been slower than anticipated. Since 2006, no offshore drilling has occurred in the Canadian Arctic due to the lack of adequate infrastructure, such as ports, roads, pipelines and the capacity to cope with a major spill.¹⁶⁴ Furthermore, disappointing hydrocarbons exploration permit auctions is clear evidence that oil companies are not ready yet to invest the huge amounts of

¹⁶² David Pugliese, "Arctic Terrain Poses Severe Challenge to Canadian Plans," *Defense News*, July 17, 2013, <http://www.defensenews.com/article/20130717/DEFREG02/307170020/Arctic-Terrain-Poses-Severe-Challenge-Canadian-Plans> (accessed September 20, 2013).

¹⁶³ Michael Byers, "Federal Budget to Hide Expensive Defence-Spending Realities," *Toronto Star*, February 11, 2014, http://www.thestar.com/opinion/commentary/2014/02/11/federal_budget_to_hide_expensive_defencespending_realities.html (accessed March 17, 2014).

¹⁶⁴ Michael Byers, "The (Russian) Arctic is Open for Business," *The Globe and Mail*, August 12, 2013, <http://byers.typepad.com/politics/2013/08/the-russian-arctic-is-open-for-business.html> (accessed March 17, 2014).

money required to extract those hard to get resources.¹⁶⁵ As explained by Terry Fenge, the four main factors affecting the economic development of the Arctic are: demand and prices for hydrocarbons and minerals, supportive infrastructures, stable political and public environment and, educated, skilled and motivated workforce.¹⁶⁶ With the possibility of Iranian oil flowing again in the global market and the evolution of new fracking technology for the extraction of shale hydrocarbons, the development of the Canadian Arctic might not happen as early as expected.¹⁶⁷ The harsh environment and high cost of operating in the Arctic will force countries and the private sector to collaborate with each other.¹⁶⁸

As a consequence of geography, the defense and security of Canada and the United States are tied to each other. As such, the Canadian Arctic transformation equation needs to include the United States. From an historical perspective, Canada and the United States, as neighbors, have developed very close relationships throughout the years, particularly concerning the defense of the North American continent. Illustrated by Michael Neiberg, History Professor at the United States Army War College,

As demonstrated by the Ogdensburg and Hyde Park agreements, America proved more than willing to play the role of volunteer firefighter, assuming for itself an active role in guaranteeing Canadian security. In large part, this American willingness represented a self-interested forward strategy of its own, of course, but it also reflected a common

¹⁶⁵Tod Griset, "Canada Auctions Arctic Oil Rights," *Energy Policy Update*, September 14, 2012, <http://energypolicyupdate.blogspot.com/2012/09/canada-auctions-arctic-oil-rights.html> (accessed March 17, 2014).

¹⁶⁶Terry Fenge, "Development Prospects: A Complex Interplay of Factor", in *Northern Exposure: Peoples, Powers and Prospects in Canada's North*, ed. Abele Frances (Montréal: Institute for Research on Public Policy, 2009), 378.

¹⁶⁷Richard Spencer, "Fracking Boom Frees the US from Old Oil Alliances," *The Telegraph*, December 13, 2013, <http://www.telegraph.co.uk/earth/energy/oil/10476647/Fracking-boom-frees-the-US-from-old-oil-alliances.html> (accessed March 17, 2014).

¹⁶⁸Rod McGuirk, "U.S. Icebreaker to Rescue 2 Ships in Antarctica," *USA Today*, January 5, 2014, <http://www.usatoday.com/story/news/world/2014/01/04/antarctic-rescue-ship-icebreaker/4316513/> (accessed January 7, 2014).

understanding of the symbiotic and synergistic links between American strategy and Canadian strategy.¹⁶⁹

As such, the United States cannot let North America, including the Canadian Arctic, be under direct military threat. The recent inclusion of maritime monitoring in the Arctic as a part of NORAD is a move in the right direction. As long as the United States remains the world military hegemon, no other country will challenge Canada's Arctic sovereignty militarily. The old, but still valid, United States nuclear deterrent will keep the Russian and Chinese away from military intervention into the 'North American' Arctic. As such, Canada does not need to militarize the Arctic. Canada needs to develop and maintain its military capability and capacity to operate in the High North but does not need to permanently militarize the Arctic, which will only contribute to militarization escalation, particularly by Russia. To defend its own country, Canada needs to look at its historical past and keep reinforcing its bilateral defense arrangements with the United States, which will ensure the defense of North America and de facto Canada and its Arctic territory.¹⁷⁰

The most probable risk for military escalation in the Arctic is misinterpretation of intentions and actions by others nations.¹⁷¹ Russia's hard response to Canada's announcement that it might intend to claim the North Pole as part of its final extended continental shelf claim is a concrete example. Less than a week after the Canadian Foreign Minister, John Baird, announced that he had asked Canadian scientists to include the North Pole in the Canadian Arctic final UNCLOS claim, Russian President Vladimir Putin told his defense's chiefs to increase

¹⁶⁹Michael S. Neiberg, "A Middle Power on the World Stage: Canadian Grand Strategy in the Twentieth Century," *Journal of Military and Strategic Studies* 14, no. 2 (January 2012): 15.

¹⁷⁰Michael S. Neiberg.

¹⁷¹Roger Howard, *The Arctic Gold Rush: The New Race for Tomorrow's Natural Resources* (London: Continuum, 2009), 21.

military presence in the region.¹⁷² As explained by Michael Byers, the decision by the Canadian Government to claim the North Pole was driven by domestic politics and not by scientific evidence. He argued that the current government does not want to be perceived as ceding this idyllic location and that by following UNCLOS, the North Pole cannot belong to Canada. As stated by Byers,

[Harper] does not want to be the prime minister seen publicly as having surrendered the north pole, even if the scientific facts don't support a Canadian claim ... What he's essentially doing here is holding this place, standing up for Canadian sovereignty, while in private he knows full well that position is untenable ... We're talking about the center of a large, inhospitable ocean that is in total darkness for three months each year, thousands of miles from any port ... The water in the north pole is 12,000ft deep and will always be covered by sea ice in the winter. It's not a place where anyone is going to be drilling for oil and gas. So it's not about economic stakes, it's about domestic politics.¹⁷³

Politicians and media have the tendency to inflate situation for their own advantages, which in return creates the risk of misperception.

The 'use it or lose it' political rhetoric designed for the domestic audience has been misinterpreted internationally. Misperceived as unilateralism and provocative, Canada's hard sovereignty narrative and actions have created tension with its Arctic neighbors, including the perceived need for militarization of the Arctic.¹⁷⁴ As mentioned by Andrew Foxall, Director of the Russian Studies Centre at the Henry Jackson Society, "It's often said that the Russians act with their Arctic policy in an aggressive, nationalistic and unilateral way. The same thing can be said about the Canadians."¹⁷⁵ Furthermore, the international perception of Canada's approach in the Arctic is well summarized by United States Navy Captain James Kraska,

Likewise, Canada is under the unilateralist spell of oceans sovereignty, going it alone in the Arctic Ocean in a vain attempt to grasp a future of stability and security amidst a

¹⁷²Luke Harding, "Russia to Boost Military Presence in Arctic as Canada Plots North Pole Claim," *The Guardian*, December 10, 2013, <http://www.theguardian.com/world/2013/dec/10/russia-military-arctic-canada-north-pole> (accessed January 23, 2014).

¹⁷³ Ibid.

¹⁷⁴Franklyn Griffiths, Rob Huebert, and P. Whitney Lackenbauer, *Canada and the Changing Arctic: Sovereignty, Security, and Stewardship* (Waterloo: Wilfrid Laurier University Press, 2011), 232-4.

¹⁷⁵Luke Harding.

rapidly changing geophysical Arctic climate and unsettling and dynamic Arctic politics. Canada has resurrected “sovereignty” patrols, loudly trumpeted plans to construct ice-strengthened patrol vessels to enforce unilateral rules in the Northwest Passage, and retreated behind the mythos of Canadian Arctic sovereignty. The storyline is recycled by the government–media–academic complex to obtain the approval—or at least the acquiescence—of the international community, especially the United States.¹⁷⁶

The hard line sovereignty domestic narrative has been detrimental to fostering good relationships with Arctic nation neighbors. However, as pointed out by Michael Byers, “The Obama administration seems to understand that Harper’s Arctic rhetoric has always been directed at Canadian voters and not at foreign governments.” Byers also pointed out, “To be fair, Harper was necessarily in constant campaign mode during five years of minority governments, and this made risky any steps that could be portrayed as possible sellouts of Canadian Arctic sovereignty including ordinary diplomatic discussions of long-standing disputes.”¹⁷⁷ As such, Byers recommended that it is time for Canada to develop closer Arctic bilateral arrangements with the United States by resolving their Northwest Passage dispute. Canada needs to avoid being perceived as isolationist and provocative while reaching out to its Arctic partners, in particular its closest ally the United States. By assuming the Chairmanship of the Arctic Council for 2013-15, Canada has a great opportunity to shape future Arctic relations, policies, and economic development.¹⁷⁸ Bilateral and multilateral collaboration and cooperation are necessary for Canada to develop the Arctic.¹⁷⁹

In summary, Canadian sovereignty and security in the Arctic are interlinked. However, the threats are not military oriented and as such Canada does not need to militarize the Arctic.

¹⁷⁶James Kraska, “International Security and International Law in the Northwest Passage,” *Vanderbilt Journal of Transnational Law*, no 42 (2009): 1121, <http://www.vanderbilt.edu/jotl/manager/wp-content/uploads/Kraska-final-cr-v2.pdf> (accessed March 20, 2014).

¹⁷⁷Michael Byers, “Time to Negotiate the Northwest Passage with the United States,” *Policy Options*, October 2011, 71, <http://www.irpp.org/en/po/the-new-normal-majority-government/time-to-negotiate-the-northwest-passage-with-the-united-states/> (accessed March 20, 2014).

¹⁷⁸Arctic Council, “Canadian Chairmanship Program 2013-2015,” Arctic Council Portal, <http://www.arctic-council.org/index.php/en/about-us/arctic-council/canadian-chairmanship/735-canadian-chairmanship-program-2013-2015> (accessed September 18, 2013).

¹⁷⁹Michael Byers, “Time to Negotiate the Northwest Passage with the United States,” 71.

Nonetheless, the Canadian Armed Forces have an important role to play in the Arctic by assisting in providing security and by supporting other government and law enforcement agencies. The Canadian Armed Forces military strategy is adequate but needs to be adequately resourced to accomplish it. However, Canada cannot do it alone. Canada needs partners to develop the Arctic economically. Canada and the United States past and future are intertwined and will need to collaborate. Resolving the two current Arctic disputes between the two North American countries is key to fostering that crucial relationship. As current Chair of the Arctic Council, Canada has a golden opportunity to shape future Arctic policies and economic development by reinforcing and expanding the existing collaboration, cooperation and communications. It is time for Canada to modify its approach and reach out to build these important relationships that will ensure a stable and peaceful Arctic transformation.

CONCLUSION

In the next decades, global warming effects and the glaciers melt are expected to make the Arctic's natural resources and navigable sea lines of communications more accessible. The Arctic presents outstanding economic development opportunities, and, thus, there are many countries that hold ambitions to claim those future resources for themselves. Who owns the Arctic is currently a diplomatic, academic, and legal debate. Nonetheless, the potential for future disputes is real and palpable. As the ice cover shrinks, the tension and competitive atmosphere could possibly develop into military conflicts. All the Arctic nations, including Russia, publicly oppose militarization. Concurrently, nations not bordering the Arctic Ocean, particularly China, have demonstrated a keen interest in Arctic geopolitics and economic development. As an Arctic nation, Canada has been loudly reaffirming its Arctic sovereign claims. However, the question for Canadian policymakers is whether to place confidence in diplomacy to avoid the militarization or to take actions to counter the perceived steps by other nations to militarize the Arctic.

Four main arguments have been brought forth in the media to justify why Canada should militarize the Arctic. To demonstrate that Canada can avoid militarizing the Arctic, it was necessary to investigate each of the four arguments, which are the Northwest Passage, Arctic territorial claims, and Russian and Chinese threats. The evidence presented here does not support those arguments. Consequently, Canada does not need to militarize the Arctic.

Nonetheless, there is a requirement for Canada to monitor, control and respond to emergency situations in the Arctic. However, there is no indication that a state on state military threat exists in the Arctic and as such, militarization of the Arctic is not necessary. There are military roles in the Arctic including reinforcing and supporting law enforcement agencies and other government agencies but these roles do not require militarization of the Arctic. To fulfill these military roles the Canadian Armed Forces must obtain the right equipment and train to operate in the Arctic. The Canadian Government will must ensure that the military receives the resources necessary to achieve their mandate.

Many nations, including Canada, are currently developing military capabilities for operations in the Arctic. However, building Arctic military capabilities does not mean that there is an intent to use it offensively. As seen previously, Arctic nations such as Russia are building these capabilities for defense purposes and to assist in the development of their portion of the Arctic. Additionally, non-Arctic nations such as China are developing Arctic capabilities for economic and geopolitical influence purposes. Without an intent and a purpose, developing military capabilities does not equate to a threat.

In the unlikely event that one day the Canadian Arctic is under real military threat or attacked, then defense treaties such as NORAD and NATO will come into play, as Canada has done several times in the past to support its allies in international conflicts. Canada does not have the resources to adequately militarize the Arctic for deterrence and control purposes against other larger military forces such as Russia, China or the United States. For Canada, to militarize the

Arctic would be futile. Furthermore, militarization of the Arctic will only escalate the tension and oblige other nations to do the same in order to balance power, particularly Russia. To have a replay of the Cold War tensions is not to any ones advantage. The Arctic is a treacherous environment that requires collaboration and cooperation to develop, not militarization.

The constant alarmist messaging about Arctic militarization in the media has has created the perception of tension and concern for security and sovereignty. This erroneous perception is a fallacy that has been wrongly exploited in the media and by self-serving elected and non-elected officials. Loose talk is probably the most dangerous threat driving military escalation in the Arctic. Canada needs to avoid being perceived as isolationist and provocative while reaching out to its Arctic and non-Arctic partners, in particular its closest ally the United States. Developing these relationships and working together are key for all Arctic and non-Arctic states.

BIBLIOGRAPHY

- Abele, Frances, ed. *Northern Exposure: Peoples, Powers and Prospects in Canada's North*. Montréal: Institute for Research on Public Policy, 2009.
- Atland, Christian. *Security Implications of Climate Change in the Arctic*. The Norwegian Defence Research Establishment, 2010.
- Arctic Council. *Arctic Human Development Report*. Joan Nymand Larsen ed. Reykjavik, Iceland: Stefansson Arctic Institute, 2004.
- Arctic Council. "Declaration on the Establishment of the Arctic Council." Ottawa, Canada. September 19, 1996.
- Arctic Integrating Concept*. Ottawa, Ontario: Chief of Force Development, 2010.
- Banks, N.D. "Forty Years of Canadian Sovereignty Assertion in the Arctic, 1947-87." *Arctic* 40, no. 4. December 1987: 285-291.
- Bercuson, David. "Continental Defense and Arctic Sovereignty, 1945-50: Solving the Canadian Dilemma." In *The Cold War and Defense*, edited by Keith Nielson and Ronald Haycock, 147-198. New York: Praeger Press, 1990.
- Berton, Pierre. *The Arctic Grail*. Toronto: Random House, 2001.
- Blank, Stephen, ed. *Russia in the Arctic*. Carlisle, PA: Strategic Studies Institute, U.S. Army War College, 2011.
- Borgerson, Scott G. "Arctic Meltdown." *Foreign Affairs* 87, no. 2 (March/April 2008). <http://www.foreignaffairs.com/articles/63222/scott-g-borgerson/arctic-meltdown> (accessed September 20, 2013).
- Bird, Kenneth J., Ronald R. Charpentier, Donald L. Gautier, David W. Houseknecht, Timothy R. Klett, Janet K. Pitman, Thomas E. Moore, Christopher J. Schenk, Marilyn E. Tennyson, and Craig J. Wandrey. "Circum-Arctic Resource Appraisal: Estimates of Undiscovered Oil and Gas North of the Arctic Circle." *United States Geological Survey Fact Sheet 2008-3049* (2008). <http://pubs.usgs.gov/fs/2008/3049/> (accessed September 17, 2013).
- Byers, Michael. "Creative Thinking on Sovereignty," *Policy Options*, March 2014. <http://irpp.org/en/po/opening-eyes/byers/> (accessed March 20, 2014).
- _____. "Time to Negotiate the Northwest Passage with the United States." *Policy Options*, October 2011. <http://www.irpp.org/en/po/the-new-normal-majority-government/time-to-negotiate-the-northwest-passage-with-the-united-states/> (accessed March 20, 2014).
- _____. *Who Owns the Arctic? Understanding Sovereignty Disputes in the North*. Vancouver: Douglas and McIntyre, 2009.
- Caldwell, Nathaniel French. *Arctic Leverage: Canadian Sovereignty and Security*. New York: Praeger, 1990.
- Canada. Canadian Library of Parliament. *Canadian Arctic Sovereignty*. Ottawa: Library of Parliament, 2006.
- Canada. Department of National Defence. *1978 Defence White Paper*. Ottawa: Canadian Communications Group, 1978.

- Canada. Department of National Defence. *Canada First Defence Strategy*. Ottawa: Minister of Public Works and Government Services Canada, May 2008.
http://www.forces.gc.ca/assets/FORCES_Internet/docs/en/about/CFDS-SDCD-eng.pdf (accessed September 18, 2013).
- Canada. Department of Foreign Affairs and International Trade. *Statement on Canada's Arctic Foreign Policy: Exercising Sovereignty and Promoting Canada's Northern Strategy Abroad*. Ottawa: Department of Foreign Affairs and International Trade, 2010.
<http://www.arctic-council.org/index.php/en/document-archive/category/12-arctic-strategies> (accessed September 16, 2013).
- Canada. Library of Parliament. *Canadian Arctic Sovereignty*. Ottawa: Parliamentary Information and Research Service, January 26, 2006.
<http://www.parl.gc.ca/Content/LOP/researchpublications/prb0561-e.htm> (accessed September 16, 2013).
- Canada. Minister of Indian Affairs and Northern Development and Federal Interlocutor for Metis and Non-Status Indians. *Canada's Northern Strategy: Our North, Our Heritage, Our Future*. Ottawa: Minister of Public Works and Government Services Canada, 2009.
<http://www.northernstrategy.gc.ca/cns/cns.pdf> (accessed September 16, 2013).
- Canada. Prime Minister's Office. "Text of Prime Minister's Speech: Securing Canadian Sovereignty in the Arctic." Prime Minister of Canada website, August 12, 2006.
<http://www.pm.gc.ca/eng/media.asp?id=1275> (accessed September 18, 2013).
- Canada. The Standing Senate Committee on Fisheries and Oceans. *Controlling Canada's Arctic Waters: The Role of the Canadian Coast Guard*. Ottawa: Clerk of the Senate, April 15, 2010. <http://www.parl.gc.ca/Content/SEN/Committee/403/fish/rep/rep02apr10-e.pdf> (accessed September 19, 2013).
- Canada. Standing Senate Committee on National Security and Defence. "Canadian Security Guide Book 2007 Edition – Coasts," *National Security and Defence Committee Report*. Ottawa: Clerk of the Senate, March 2007.
http://publications.gc.ca/collections/collection_2011/sen/yc33-0/YC33-0-391-11-eng.pdf (accessed September 19, 2013).
- Carnaghan, Matthew, and Allison Goody. *Canadian Arctic Sovereignty*. Research for Committees, Ottawa: Library of Parliament, 2006.
- Coates, Kenneth. *Canada's Colonies: A History of the Northwest Territories and the Yukon*. Toronto: James Lorimer and Company, 1985.
- Coates, Kenneth, and William Morrison. *Land of the Midnight Sun*. Montreal: McGill University Press, 2005.
- Coates, Kenneth, Whitney Lackenbauer, William Morrison, and Greg Poelzer. *Arctic Front: Defending Canada in the Far North*. Toronto: Thomas Allen Publishers, 2008.
- Coates, Kenneth, and Greg Poelzer. *On the Front Lines of Canada's Northern Strategy*. Saskatoon, Canada: International Centre for Governance and Development, 2010.
- Crosby, Ann Denholm. "A Middle Power Military in Alliance: Canada and NORAD." *Journal of Peace Research* 34, no. 1 (February 1997): 37-52.
- Dimitrakopoulou, Sophia and Andrew Liaropoulous. "Russia's National Security to 2020: A Great Power in the Making?" *Caucasian Review of International Affairs*, 4, no. 1 (Winter 2010): 35-42. http://www.cria-online.org/10_4.html (accessed April 13, 2014).

- Dittman, Paul. "In Defence of Defence: Canadian Arctic Sovereignty and Security." *Journal of Military and Strategic Studies* 11 no. 3 (Spring 2009): 3-11.
- Dege, William. *War North of 80: The Last German Arctic Weather Station of World War II*. Translated by William Barr. Calgary, AB: University of Alberta Press, 2004.
- Dolata-Kreutzkamp, Petra. "Canada's Arctic Policy: Transcending the Middle Power Model?" In *Canada's Foreign and Security Policy: Soft and Hard Power Strategies of a Middle Power*, edited by Nik Hynek, David Bosold, and Stephen Clarkson, 261-277. Don Mills, ON: Oxford University Press, 2010.
- Dufresne, Robert. "Canada and the United States: Arctic Sovereignty." *Parliament of Canada*, December 2008. http://www.parl.gc.ca/content/lop/researchpublications/prb0834_13-e.htm (accessed March 20, 2014).
- Eger, Karl Magnus. *Marine Traffic in the Arctic – A Report Commissioned by the Norwegian Mapping Authority*. Oslo: Analyse & Strategi AS, August 2011.
- Ekos Research Associates. *Rethinking the Top of the World: Arctic Security Public Opinion Survey*. Ottawa: Ekos Research Associates, 2011. <http://www.ekos.com/admin/articles/2011-01-25ArcticSecurityReport.pdf> (accessed September 18, 2013).
- Elliot-Meisel, Elizabeth. *Arctic Diplomacy: Canada and the United States in the Northwest Passage*. New York: Peter Lang, 1998.
- Eyre, Kenneth C. "Custos Borealis: The Military in the Canadian North." PHD thesis, London University 1983. <https://kclpure.kcl.ac.uk/portal/files/2932914/255387.pdf> (accessed September 20, 2013).
- Granatstein, Jack. "The Importance of Being Less Earnest: Promoting Canada's National Interest Through Tighter Ties with the U.S." *Benefactor's Lecture*. Toronto: C.D. Howe Institute, 2003. http://www.cdhowe.org/pdf/benefactors_lecture_2003.pdf (accessed September 20, 2013).
- Grant, Shelagh, D. *Sovereignty or Security? Government Policy in the Canadian North, 1936-1950*. Vancouver: UBC Press, 1988.
- _____. *Polar Imperatives: A History of Arctic Sovereignty in North America*. Toronto ON: Douglas and McIntyre, 2010.
- Gray, Colin, and Eliot Cohen eds. *Strategy in the Contemporary World*. 2nd ed. Oxford: Oxford University Press, 2007.
- Gray, David H. "Canada's Unresolved Maritime Boundaries," *IBRU Boundary and Security Bulletin*, Autumn 1997. https://www.dur.ac.uk/resources/ibru/publications/full/bsb5-3_gray.pdf (accessed 21 March, 2014).
- Griffiths, Franklyn, Rob Huebert, and Whitney P. Lackenbauer. *Canada and the Changing Arctic: Sovereignty, Security, and Stewardship*. Waterloo: Wilfrid Laurier University Press, 2011.
- Griffiths, Franklyn. "Pathetic Fallacy: That Canada's Arctic Sovereignty Is On Thinning Ice." *Canadian Foreign Policy* 11, no 3 (2004): 1-16.
- _____. *Politics of the Northwest Passage*. Kingston, Ontario: McGill-Queen's University Press, 1987.

- Harrington, Caitlin. "Eyeing Up the New Arctic: Competition in the Arctic Circle." *Jane's Defence Weekly* 45, no. 3 (January 16, 2008): 19-27.
- Hartmann, Jacques. "Canada and Denmark Reach Agreement on the Lincoln Sea Boundary," *Blog of the European Journal of International Law* (January 10, 2013). <http://www.ejiltalk.org/canada-and-denmark-reach-agreement-on-the-lincoln-sea-boundary/> (accessed March 20, 2014).
- Heininen, Lassi. 1992. "The Conflict of Interests Between the Environment and Military Strategy in Northern Waters and the Arctic." In *Perspectives on Environmental Conflict and International Relations*, edited by Jyrki Käkönen, 55-71. London: Pinter Publishers, 1992.
- Heininen, Lassi, and Heather N. Nicol. "The Importance of Northern Dimension Foreign Policies in the Geopolitics of the Circumpolar North." *Geopolitics* 12, no. 1 (Spring 2007): 133-165.
- Huebert, Rob. "Canadian Arctic Security: Preparing for a Changing Future." In *Behind The Headlines*, edited by Franklyn Griffiths, 14-22. Toronto: Canadian International Council, 2008.
- _____. "Canada and the Changing International Arctic: At the Crossroads of Cooperation and Conflict." In *Northern Exposure: Peoples, Powers and Prospects for Canada's North*. Edited by Frances Abele, Thomas J. Courchene, F. Leslie Seidle, and France St-Hilaire, 77-106. Ottawa: Institute for Research on Public Policy, 2009.
- _____. *Canadian Arctic Sovereignty and Security in a Transforming Circumpolar World*. Foreign Policy for Canada's Tomorrow no. 4. Toronto: Canadian International Council, July 2009.
- _____. *The Newly Emerging Arctic Security Environment*. Calgary AB: Canadian Defence and Foreign Affairs Institute, 2010.
- Hober, Kaj. "Territorial Disputes and Natural Resources: The Melting of the Ice and Arctic Disputes." *Oil & Gas Journal* 109, no. 6 (February 7, 2011) <http://www.ogj.com/articles/print/volume-109/issue-6/exploration-development/territorial-disputes-and-natural-resources.html> (accessed September 19, 2013).
- Howard, Roger. *The Arctic Gold Rush: The New Race for Tomorrow's Natural Resources*. London: Continuum, 2009.
- Humpert, Malt. *The Future of Arctic Shipping – A New Silk Road for China*. Washington: The Arctic Institute, 2013.
- "Ilulissat Declaration." Arctic Ocean Conference, Ilulissat, Greenland, May 27-29, 2008. http://www.oceanlaw.org/downloads/arctic/Ilulissat_Declaration.pdf (accessed January 20, 2014).
- Jackobson, Lynda. "China Prepares for an Ice-Free Arctic." *SPIRI Insights on Peace and Security*, no. 2, March 2010. <http://books.sipri.org/files/insight/SIPRIInsight1002.pdf> (accessed February 4, 2014).
- Jockel, Joseph T. *Canada in NORAD: 1957-2007, A History*. Montreal: Publication for Queen's Centre for International Relations & the Queen's Defence Management Program by McGill-Queen's University Press, 2007.

- . *Security to the North: Canada-U.S. Defense Relationships in the 1990s*. East Lansing: Michigan State University Press, 1991.
- Kaplan, Robert D. *Monsoon: The Indian Ocean and the Future of American Power*. New York: Random House, 2010.
- Killaby, Guy. “Great Game in a Cold Climate: Canada’s Arctic Sovereignty in Question.” *Canadian Military Journal* 6, no. 4 (Winter 2005-2006): 31-40.
- Kirkey, Christopher. “Smoothing Troubled Waters: The 1988 Canada-United States Arctic Co-operation Agreement.” *International Journal* 50 no. 2 (1995): 401-426.
- Kirkton, John, and Radoslava N. Stefanova, eds. *The G8, the United Nations, and Conflict Prevention (G8 and Global Governance)*. Burlington, VT: Ashgate Publishing Company, 2004.
- Kraska, James. “The Law of the Sea Convention and the Northwest Passage.” *International Journal of Marine and Coastal Law* 22, no. 2 (2007): 257-282.
- Lackenbauer, P. Whitney. “Canada’s Northern Defenders: Aboriginal Peoples in the Canadian Rangers, 1947-2005.” In *Aboriginal Peoples and the Canadian Military: Historical Perspectives*, edited by P. Whitney Lackenbauer, and Craig Leslie Mantle, 160-187. Winnipeg: Canadian Defence Academy Press, 2007.
- . *From Polar Race to Polar Saga: An Integrated Strategy for Canada and the Circumpolar World*. Toronto: Canadian International Council, 7 April 2009.
- . *The Canadian Forces and Arctic Sovereignty: Debating Roles, Interests and Requirements, 1968-1974*. Waterloo, Ontario: Laurier Centre for Military Strategic and Disarmament Studies, 2010.
- Lackenbauer, P. Whitney, and Peter Kikkert. “Sovereignty and Security: The Department of External Affairs, the United States, and Arctic Sovereignty, 1945-68.” In *Serving the National Interest: Canada’s Department of Foreign Affairs and International Trade, 1909-2009*, edited by Greg Donaghy, 125-153. Calgary: University of Calgary Press, 2010.
- Lajeunesse, Adam. *Lock Stock and Icebergs: Defining Canadian Sovereignty from Mackenzie King to Stephen Harper*. Calgary, AB: Centre for Military and Strategic Studies, 2008.
- Lamborn, Alan C. “Theory and the Politics in World Politics.” *International Studies Quarterly* 41, no. 2 (1997): 187-214.
- Lasserre, Frederic. *China and the Arctic: Threat or Cooperation Potential for Canada*, China Papers no.11, Canadian International Council, June 2010. <http://www.opencanada.org/wp-content/uploads/2011/05/China-and-the-Arctic-Frederic-Lasserre.pdf> (accessed September 19, 2013).
- Lindsey, George. *Strategic Stability in the Arctic*. London: International Institute for Strategic Studies, 1989.
- Llewellyn, Mark. *Great World War II Battles in the Arctic*. London: Praeger Publishers, 2009.
- Lovegrove, Dwayne “Suttherland in the 21st Century: Invariants in Canada’s Policy Agenda Since 9/11.” *Canadian Military Journal* 10, no. 3 (Summer 2010): 10-18.

- Mankoff, Jeffrey. "Eurasian Energy Security." *Council on Foreign Relations*, February 2009. www.cfr.org/content/publications/attachments/Eurasia_CSR43.pdf (accessed March 20, 2014).
- Middlemiss, Danford William, and Joel Sokolsky J. *Canadian Defence: Decisions and Determinants*. Toronto: Harcourt Brace Jovanovich, Canada, 1989.
- Mychajlyszyn, Natalie. *The Arctic: Canadian Security and Defence*. Ottawa: Parliamentary Information and Research Service, October 24, 2008. <http://www.parl.gc.ca/content/lop/researchpublications/prb0806-e.pdf> (accessed September 20, 2013).
- Nadler, John. *A Perfect Hell: The Forgotten Story of the Canadian Commandos of the Second World War*. Toronto: Anchor Publishing, 2005.
- Neiberg, Michael S. "A Middle Power on the World Stage: Canadian Grand Strategy in the Twentieth Century." *Journal of Military and Strategic Studies* 14, no. 2 (January 2012): 1-21.
- North American Aerospace Defense Command. "About NORAD." NORAD Website. <http://www.norad.mil/AboutNORAD.aspx> (accessed September 19, 2013).
- Norway. Norwegian Ministry of Foreign Affairs. *The Norwegian Government's High North Strategy*. December 1, 2006.
- O'Dwyer, Gerard. "NATO Rejects Direct Arctic Presence," *Defense News*, May 29, 2013. <http://www.defensenews.com/article/20130529/DEFREG/305290022/NATO-Rejects-Direct-Arctic-Presence> (accessed on September 20, 2013).
- O'Rourke, Ronald. *Changes in the Arctic: Background and Issue for Congress*. CRS Report for Congress R41153. Washington: Congressional Research Service, July 21, 2010. <http://www.fas.org/sgp/crs/misc/R41153.pdf> (accessed September 18, 2013).
- Overland, James E. and Muyin Wang, "When will the summer Arctic be nearly sea ice free?" *Geophysical Research Letters* 40, no 10 (May 28, 2013): 2097–2101.
- Pharand, Donat. *Canada's Arctic Water in International Law*. Cambridge: Cambridge University Press, 1988.
- Pickersgill, J.W. *Mackenzie King Record, Volume I, 1939-1944*. Toronto: University of Toronto Press, 1960.
- Pugliese, David. "Arctic Terrain Poses Severe Challenge to Canadian Plans." *Defense News*, July 17, 2013. <http://www.defensenews.com/article/20130717/DEFREG02/307170020/Arctic-Terrain-Poses-Severe-Challenge-Canadian-Plans> (accessed September 20, 2013).
- Rappaport, Michael. "Northern Exposure," *National*, January-February 2011, 18-25. http://cbanational.rogers.dgtpub.com/2011/2011-02-28/pdf/Northern_Exposure.pdf (accessed March 19, 2014).
- Rice, Gary. "Four Selected Intrusion Scenarios." In *Defence Requirements for Canada's Arctic*, edited by Brian MacDonald, 65-78. Ottawa: Conference of Defence Associations Institute, 2007.
- Richter, Andrew. *Avoiding Armageddon: Canadian Military Strategy and Nuclear Weapons, 1950-63*. Vancouver: UBC Press, 2002.

- Robertson, Colin. "Stephen Harper's Management of the Canada-US Relationship," *Policy Options*, April 2012. <http://www.irpp.org/en/po/harpers-foreign-policy/stephen-harpers-management-of-the-canada-us-relationship/> (accessed March 21, 2014).
- Sale, Richard and Eugene Potapov. *The Scramble for the Arctic*. London: Frances Lincoln Limited Publishers, 2010.
- Shadwick, Martin. "Due North", *Canadian Military Journal*, 8, no. 1 (Spring 2007): 103-4. <http://www.journal.forces.gc.ca/vo8/no1/doc/shadwick-eng.pdf> (accessed on January 19, 2014).
- Sloan, Elinor. *Security and Defence in the Terrorist Era: Canada and North America*. Montreal: McGill-Queen's University Press, 2005.
- Smith, Heather. "Choosing Not to See." *Canada International Journal* 65, no. 4 (Autumn 2010): 931-42.
- Teeple, Nancy. "A Brief History of Intrusions into the Canadian Arctic." *Canadian Army Journal*, 12, no. 3 (Winter 2010): 38-52.
- United Nations Conventions on the Law of the Sea (UNCLOS). December 10, 1982. http://www.un.org/Depts/los/convention_agreements/texts/unclos/closindx.htm (accessed September 17, 2013).
- United States. *National Security Presidential Directive and Homeland Security Presidential Directive no 66/ Homeland Security Presidential Directive 25* (The White House, January 9, 2009). <http://www.fas.org/irp/offdocs/nspd/nspd-66.htm> (accessed September 18, 2013).
- United States. *United States of America Department of Defense Arctic Strategy*. Secretary of Defence (Pentagon, November 2013). http://www.defense.gov/pubs/2013_Arctic_Strategy.pdf (accessed December 19, 2013).
- United States. *United States of America National Strategy for the Arctic Region* (The White House, May 2013). http://www.whitehouse.gov/sites/default/files/docs/nat_arctic_strategy.pdf (accessed September 18, 2013).
- Wang, Muyin, and James E. Overland. "A Sea Ice Free Summer Arctic within 30 Years?" *Geophysical Research Letters* 36, no. L07502 (April 3, 2009): 8-15. <http://archive.mrc.org/pdf/WANG-OVERLAND-ARCTIC%20SEA%20ICE%20ESTIMATE.pdf> (accessed September 18, 2013).
- Woodman, Richard. *Arctic Convoys, 1941-45*. London: John Murray, 1995.
- Young, Oran R. *Arctic Politics: Conflict and Cooperation in the Circumpolar North*. Hanover, NH: University Press of New England for Dartmouth College, 1992.
- _____. *Creating Regimes*. Ithaca, NY: Cornell University Press, 1998.